STARTLING STORIES

15¢

MARCH

A THRILLING PUBLICATION

FEATURING

WHEN NEW YORK VANISHED

A Book-Length Novel of the Missing Metropolis

By HENRY KUTTNER

•

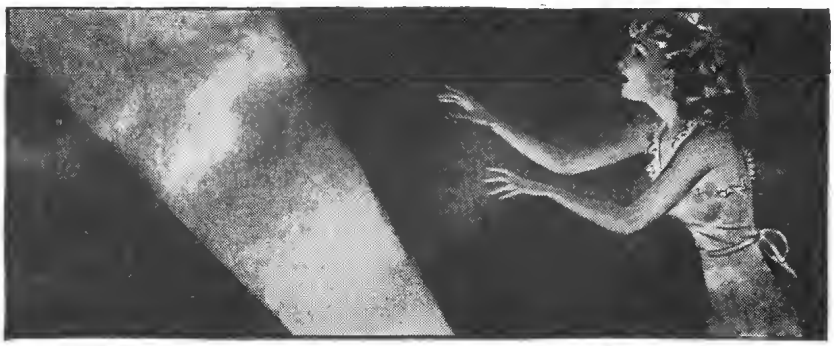
LIFE STORY OF SIR ISAAC NEWTON TOLD IN PICTURES

"I WAS TRAPPED IN A BLAZING INFERNO!"

A true experience of MRS. LILLIAN POKEDOFF, *Brooklyn, N. Y.*

"AN OMINOUS, CRACKLING NOISE awoke me the first night I was visiting in a strange farmhouse," writes Mrs. Pokedoff. "Choking and coughing from smoke, I groped for the bedroom door and staggered out into the hall.

"IN THE THICK, BILLOWING SMOKE I couldn't locate the stairway. Then I heard a muffled shout from below and a beam of light bored through the darkness, showing me the way to safety.



"I STUMBLED DOWN THE STEPS just in time—for a kerosene tank exploded and the house burned to the ground! I sincerely say that I owe my life to those powerful and dependable 'Eveready' *fresh* DATED batteries!

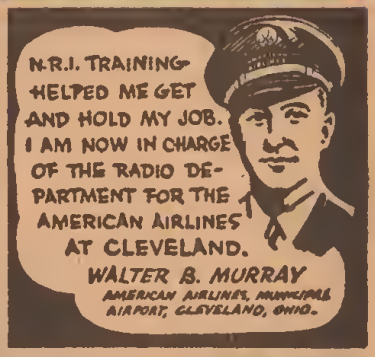
(Signed) (Mrs) Lillian Pokedoff."

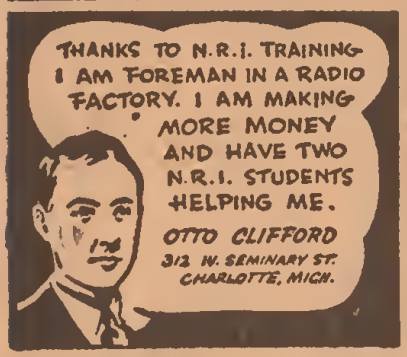
FRESH BATTERIES LAST LONGER... *Look for the* DATE-LINE

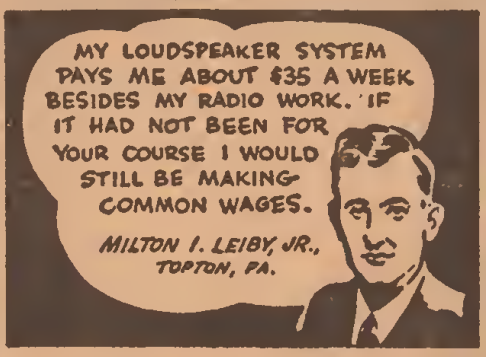
NATIONAL CARBON COMPANY, INC., 30 EAST 42nd STREET, NEW YORK, N. Y.

Unit of Union Carbide UCC *and Carbon Corporation*

Read How These Men Got Better Jobs
THEN FIND OUT WHAT RADIO OFFERS YOU Mail Coupon







I will Train You at Home for RADIO *and* TELEVISION

Radio is a yonng, growing field with a futnre, offering many good pay spare time and full time job opportunities. And you don't have to give np your present job to become a Radio Technician. I train yon right at home in your spare time.

Why Many Radia Technicians Make $30, $40, $50 a Week

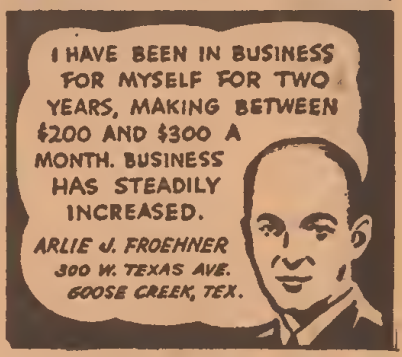
Radio broadcasting stations employ engineers, operators, technicians. Radio manufacturers employ testers, inspectors, foremen, servicemen in good-pay jobs. Radio jobbers, dealers, employ installation and service men. Many Radio Technicians open their own Radio sales and repair businesses and make $30, $40, $50 a week. Others hold their regular jobs and make $5 to $10 a week fixing Radios in spare time. Automobile, police, aviation, Commercial Radio; loudspeaker systems, electronic devices are other fields offering opportunities for which N.R.I. gives the required knowledge of Radio. Television promises to open good jobs soon.

Many Make $5, $10 a Week Extra In Spare Time While Learning

The day you enroll, I start sending yon Extra Money Job Sheets which start showing you how to do Radio repair jobs. Throughout your course I send plans and directions which have helped many make $200 to $500 a year in spare time while learning. I send special Radio equipment to conduct experiments and build circuits. This 50-50 training method makes learning at home interesting, fascinating, practical. I ALSO GIVE YOU A MODERN, PROFESSIONAL, ALL-WAVE, ALL-PURPOSE SET SERVICING INSTRUMENT to help yon make money fixing Radios while learning and equip you for full time work after you graduate.

Find Out What Radia Offers Yau Mail Caupon Belaw

Act Today! Mail the coupon for my 64-page Book, "Rich Rewards in Radio." It points out Radio's spare time and full time opportunities and those coming in Television; tells about my Course in Radio and Television; shows many letters from men I have trained, telling what they are doing and earning. Read my money back agreement. MAIL COUPON in an envelope or paste on a penny postcard—NOW!



J. E. Smith, President
Dept. OC09, National Radio Institute
Washington, D. C.

MAIL NOW • Get 64 page book FREE

J. E. SMITH, President, Dept. OC09,
National Radio Institute, Washington, D. C.

Dear Mr. Smith: Send me FREE, without obligation, your 64-page book, "Rich Rewards in Radio," which points out Radio's opportunities and tells how you train men at home to be Radio Technicians. (Write Plainly.)

Name..... Age....

Address .....

City..... State.....

★ THE BEST IN SCIENTIFICTION ★

STARTLING STORIES

Vol. 3, No. 2 CONTENTS March, 1940

A Complete Book-Length Scientifiction Novel

WHEN NEW YORK VANISHED

By HENRY KUTTNER

Madness Rules when the World's Greatest City is Catapulted into Another Dimension—While Civilization Ponders the Enigma of the Missing Metropolis! 14

Other Unusual Stories

THEY CHANGED THE WORLD ..... Jack Binder 90
A True Picture-Story of the Life of Sir Isaac Newton

THE PHANTOM TELEVIEW ..... Bob Olsen 92
A Scientifiction Hall of Fame Story

STATION DEATH ..... Oscar J. Friend 106
The Black Jungle Doesn't Mix with White Man's Magic!

GUINEA PIG, PH. D. ..... Alfred Bester 116
All Life's Secrets are Revealed on Dr. Winters' Lab. Tables!

Special Features

MEET THE AUTHOR ..... Henry Kuttner 11
REVIEW OF SCIENCE FICTION FAN PUBLICATIONS .. The Editor 12
GUEST EDITORIAL ..... Manly Wade Wellman 89
PRIZE-WINNING COVER CONTEST LETTERS ..... Announcement 104
SCIENCE QUESTION BOX ..... Questions and Answers 111
THRILLS IN SCIENCE—Thumbnail Sketches ..... Mort Weisinger 112
THE ETHER VIBRATES ..... Announcements and Letters 119
SCIENTIFIC CROSSWORD PUZZLE ..... A Brain-Teaser 120

STARTLING STORIES, published bi-monthly by Better Publications, Inc., N. L. Pines, President, at 4600 Diversey Ave., Chicago, Ill. Editorial and executive offices, 22 West 48th St., New York, N. Y. Entered as second class matter September 29, 1938, at the post office at Chicago, Illinois, under the act of March 3, 1879. Copyright, 1940, by Better Publications, Inc. Yearly $.90, single copies $.15; foreign and Canadian postage extra. Manuscripts will not be returned unless accompanied by self-addressed stamped envelope and are submitted at the author's risk. Names of all characters used in stories and semi-fiction articles are fictitious. If a name of any living person or existing institution is used, it is a coincidence.

Companion magazines: Thrilling Wonder Stories, Captain Future, Strange Stories, Popular Western, Thrilling Mystery, Thrilling Western, Thrilling Detective, Thrilling Adventure, Thrilling Love, The Phantom Detective, The Lone Eagle, Sky Fighters, Popular Detective, Thrilling Ranch Stories, Thrilling Sports, Popular Sports Magazine, Range Riders, Texas Rangers, Everyday Astrology, G-Men, Detective Novels Magazine, Black Book Detective Magazine, Popular Love, Masked Rider Western Magazine, The Ghost, Rio Kid Western, Thrilling Spy Stories, and West.

PRINTED IN THE U. S. A.

GIVEN BIKE

Nothing to Buy

BOYS! GIRLS!

BIKE OR CASH SEND NO MONEY

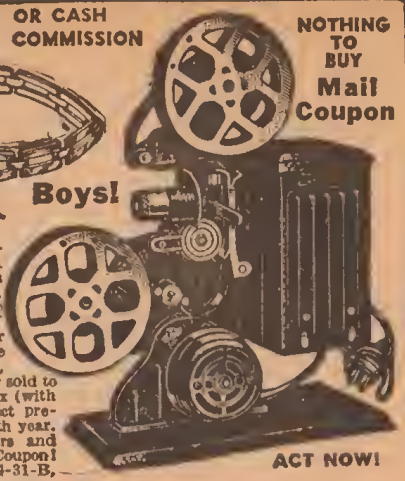
Mail Coupon

Fully equipped—Balloon tires and all. Nifty!—THIS Bike, Cash or choice of other marvelous premiums given. — SIMPLY GIVE AWAY FREE good size beautifully colored famous Art Pictures with our well known White CLOVERINE Brand **SALVE**, used for chaps, mild burns, shallow cuts, etc. Salve easily sold to friends, relatives, and neighbors at 25c a box (with favorite picture FREE). Remit and select premium as explained in premium catalog. 45th year. We are fair and square. Many friends and customers waiting to buy! Act Now! Mail Coupon! Salve and pictures sent postage paid. **WILSON CHEM. CO., INC., Dept. TG-31-A, TYRONE, PA.**

BOTH GIVEN OR CASH COMMISSION

NOTHING TO BUY Mail Coupon

Ladies! Girls!

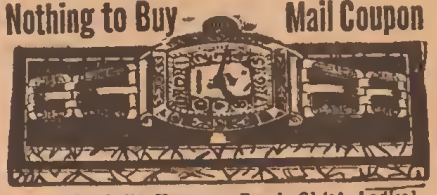


Boys!

Big Movie—Adjustable lamp socket—Special bulb—Shows good size picture. A Whiz! Lovely little watch about size of a dime. A beauty! EITHER Movie Machine, Wrist Watch, Cash or choice of other fine premiums Given.—SIMPLY GIVE AWAY FREE good size beautifully colored popular Art Pictures with our well known White CLOVERINE Brand **SALVE** used for chaps, mild burns, shallow cuts, etc. Salve easily sold to friends, relatives and neighbors at 25c a box (with favorite picture FREE). Remit and select premium as explained in premium catalog. 45th year. We are fair and square. Many customers and friends waiting to buy! Act Now! Mail Coupon! WILSON CHEM. CO., INC., Dept. TG-31-B, TYRONE, PA.

ACT NOW!

BOTH GIVEN Nothing to Buy — Mail Coupon



Send No Money — Boys! Girls! Ladies! Phonograph plays 10" records. Complete. Beautiful Wrist Watch. Wonders!—EITHER Phonograph, Watch, Cash, or other delightful premiums given—SIMPLY GIVE AWAY FREE good size beautifully colored famous Art Pictures with our well known White CLOVERINE Brand **SALVE** used for chaps, mild burns, shallow cuts, etc. Salve easily sold to friends, relatives, and neighbors at 25c a box (with wonderful picture FREE). Remit and select premium as per catalog. 45th year. Many customers and friends waiting to buy! Act Now Mail Coupon! WILSON CHEM. CO., INC. Dept. TG-31-C, TYRONE, PA.

GIVEN NOTHING TO BUY! SEND NO MONEY! BOYS!

Iver Johnson Bolt Action 22 Cal. Self-Cocking Safety RIFLE—22" long. STURDY! THIS RIFLE, Cash, or choice of other valuable premiums given—SIMPLY GIVE AWAY FREE good size beautifully colored famous Art Pictures with our well known White CLOVERINE Brand **SALVE** used for chaps, mild burns, shallow cuts, etc. Salve easily sold to friends, relatives, and neighbors at 25c a box (with wonderful picture FREE). Remit and select premium as explained in premium catalog. 45th year. We are fair and square. Don't delay. Act Now! Mail Coupon! WILSON CHEM. CO., INC., Dept. TG-31-D, TYRONE, PA. **MAIL COUPON**

GIVEN

NOTHING TO BUY

Send No Money

GUITAR

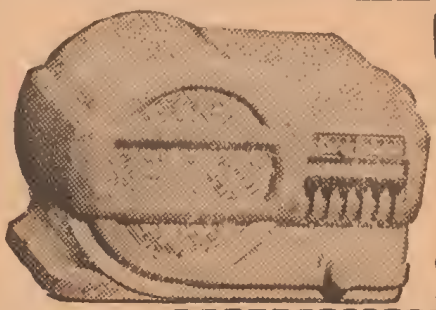
or Cash

BOYS GIRLS

MAIL COUPON

Big Standard Size regulation GUITAR. It's a Dandy! THIS Guitar, Cash or choice of other valuable premiums given— SIMPLY GIVE AWAY FREE good size beautifully colored famous Art Pictures with our well known White CLOVERINE Brand **SALVE** used for chaps, mild burns, shallow cuts, etc. Salve easily sold to friends, relatives and neighbors at 25c a box (with wonderful picture FREE). Remit and select premium as explained in premium catalog. 45th year. We are fair and square. Many customers and friends waiting to buy. Act now! Mail Coupon! Salve and pictures sent postage paid.

WILSON CHEM.CO., INC. Dept. TG-31-E. TYRONE, PA.



GIVEN

NOTHING TO BUY

SEND NO MONEY

MAIL COUPON

RADIO OR CASH

Set to Left

Six position—Automatic Tuning — Superhet AC-DC-GET THE NEWS! This Radio, Cash or choice of other wonderful premiums GIVEN — SIMPLY GIVE AWAY FREE good size beautifully colored popular Art Pictures with our well known White CLOVERINE Brand **SALVE** used for chaps, mild burns, shallow cuts, etc. Salve easily sold to friends at 25c a box (with favorite picture FREE). Remit and select premium per catalog. Mail Coupon. WILSON CHEM. CO., INC., Dept. TG-31-H, TYRONE, PA.

MAIL COUPON
WILSON CHEM. Co., Inc.

Tyrone, Pa. Dept. TG-31, Date.....

Gentlemen: Please send me 12 beautiful art pictures (with 12 boxes White CLOVERINE Brand SALVE to sell at 25c a box (giving favorite picture FREE). I will remit within 30 days, select a premium or keep cash commission as per new premium plan catalog sent with order, postage paid.

NAME .....

Rd or

BOX NO..... ST.....

TOWN..... STATE.....

Print Your Last Name Only in Spaces Below:

WRITE, or PASTE COUPON on a POSTAL CARD or MAIL COUPON in an envelope TODAY!

HERE IT IS!

66 PAGES IN FULL COLOR

GET YOUR COPY TODAY!

The Newest and Best of Them All!

•

ACTION • MYSTERY • LAUGHS

NOW ON SALE 10¢ ASK FOR IT!

IMAGINE THEIR JOY

WHEN THEY FOUND THEY COULD PLAY

This easy as A.B.C. way!

Plays on Radio

I am happy to tell you that for four weeks I have been on the air over our local radio station. So thanks to your institution for such a wonderful course.

* W. H. S., Alabama.

Learned Quickly at Home

I didn't dream I could actually learn to play without a teacher. Now, when I play for people they hardly believe that I learned to play so well in so short a time.

* H. C. S., Calif.

Wouldn't Take $1,000 for course

The lessons are so simple that any one can understand them. I have learned to play by note in a little more than a month. I wouldn't take a thousand dollars for my course.

* S. E. A., Kansas City, Mo.

Surprised Friends

I want to say that my friends are greatly surprised at the different pieces I can already play. I am very happy to have chosen your method of learning.

* B. F., Bronx, N. Y.

Best Method by Far

Enclosed is my last examination sheet for my course in Tenor Banjo. This completes my course. I have taken lessons before under teachers, but my instructions with you were by far the best.

* A. O., Minn.

What Instrument Would You Like To Play?

JUST name your instrument and we'll show you how you can learn to play it—quickly, easily, in spare time at home. Never mind if you don't know one note of music from another—don't worry about "special talent." And forget all you've ever heard about music's being hard to learn.

The truth of the matter is that *thousands now play who never thought they could!* Yes, men and women everywhere have discovered this amazingly easy way to learn music at home. Now they are enjoying the thrilling satisfaction of playing the piano, violin, guitar, saxophone or other favorite instruments. Some of them are playing in orchestras and over the radio; others are teaching music, making money in spare or full time. And thousands are having the time of their lives playing for their own enjoyment and the entertainment of their friends.

It all came about when they wrote to the U. S. School of Music for the Free Booklet that shows you how EASY it is to learn music at home this modern way. No tedious study and practice, no tiresome exercises. You learn to play *by playing*—start right in almost at once with the melody of a simple tune! It takes only a few minutes a day and the cost is trifling; you save the expense of a private teacher. Does it sound too good to be true? Mail the coupon and get the FREE BOOKLET that gives all the facts. (Our forty-second year—Est. 1898.) U. S. School of Music, 2942 Brunswick Bldg., N. Y. C., N. Y.

SEND FOR FREE BOOKLET

● You'll open your eyes when you find how quickly and easily you can learn to play your favorite instrument. Don't doubt; don't hesitate. Send for the fascinating illustrated booklet that answers all your questions: that explains how easily and quickly you can learn your favorite instrument as thousands of others have done. If interested, mail the coupon, NOW. (Instruments supplied when needed, cash or credit.)

**Actual pupil's names on request. Pictures by professional models.*

U. S. SCHOOL OF MUSIC
2942 Brunswick Bldg., New York City, N. Y.

I am interested in music study, particularly in the instrument checked below. Please send me your free illustrated booklet, "How to Learn Music at Home."

Piano	Hawaiian Guitar	Clarinet
Violin	Banjo	Trombone
Guitar	Mandolin	Flute
Piano Accordian	Ukulele	Piccolo
Plain Accordion	Cornet	Organ
Saxophone	Trumpet	Drums and Traps
Cello	Harp	Modern Elementary Harmony
		Voice Culture

Name..... Have You This Instru?.....

Address.....

City..... State.....

Fascinating, Profitable Profession

NOW OPEN to More Men & Women

If you are looking for a NEW and BETTER way to make a living, take up Swedish Massage, for now you can learn at home. This interesting big pay profession was for years available only to a few. Its secrets were guarded jealously and fabulous prices were paid for instruction. This same instruction is now available to you at a mere fraction of the former price and you need not leave your present work until you have qualified as an expert and can command an expert's pay. The demand for BOTH MEN AND WOMEN has shown a steady increase and few, if any, have ever lacked employment.

LEARN IN 90 DAYS AT HOME

Use spare time at home to master a profession which has made thousands of dollars for ambitious man and women. Many graduates have completed their training in three months but you can take your own time, it need not interfere with either work or pleasure. All instruction has been prepared by the teachers in our famous resident school—the same material is used and a DIPLOMA is awarded upon graduation.

ANATOMY CHARTS AND BOOKLET FREE

No Obligation Of Any Kind SEND COUPON

THE COLLEGE OF SWEDISH MASSAGE (Successor to National College of Massage), Dept. 663 — 30 E. Adams St., Chicago

You may send me FREE and postpaid, Anatomy Charts, booklet, containing photographs and letters from graduates and complete details of your offer.

Name .....

Address .....

City ..... State .....

High School Course at Home — **Many Finish in 2 Years**

Go as rapidly as your time and abilities permit. Course equivalent to resident school work — prepares you for entrance to college. Standard H. S. texts supplied — Diploma. Credit for H. S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School graduate. Start your training now. Free Bulletin on request. No obligation.

American School, Dept. H-358, Drexel, at 58th, Chicago

NEVERLIFT IRON REST and Universal Cord Control

Iron "slides on" and "slides off" this modernistic rest. Saves lifting iron over 200 times each ironing day—more than 900 lbs. Cord control prevents electric cord from kinking. Keeps it up out of way. Fire proof and safe.

AGENTS Make lots of money—big money—easy money selling this device. 100% profit and up. Write for particulars—NOW.

NEVERLIFT COMPANY INC.
6901-BU Woodlawn Ave. Chicago, Ill. U.S.A.

WANTED ORIGINAL SONG POEMS any subject. YOU CAN write the words for a song. Don't delay—send us your poem for immediate consideration.

RICHARD BROS., 74 Woods Building, Chicago, Ill.

Cleans Cars NEW WAY!

AGENTS! Hot Seller!

REVOLUTIONARY chemical sponge cleans cars like magic! Banishes auto-washing drudgery. Cleans linoleum woodwork, windows like a flash! Auto owners, housewives wild about it. *Agents making phenomenal profits!* SAMPLE OFFER—Samples sent ON TRIAL to first person in each locality who writes. No obligation. Get details. *Be first—send your name TODAY!* THE KRISTEE CO., 1431 Bar Street, Akron, Ohio

Good News for Fantasy Collectors!

DISCOVERED! Three hundred copies of Garret Smith's book, "Between Worlds," containing the classic interplanetary story of all times!

A decade ago we selected the most fascinating, and perhaps the greatest classic of interplanetary stories, and published it in modern book form with flexible covers. Fantasy fans ordered thousands of copies, and the supply became exhausted.

Only the other day, however, we came across a few hundred copies of "Between Worlds" in our archives. We are offering these for sale, at fifty cents each, to the first three hundred readers that ask for them.

Mail your orders to STARTLING STORIES, 22 W. 48th St., New York City, N. Y. Enclose coin, postage stamps of small denominations (1-2-3c) or money order. A perfect copy of "Between Worlds" will be promptly sent you by return mail! Incidentally, Garret Smith is the famous author of "The Moon Metal," "Treasures of Tantalus," and "Slaves of the Wire."

A New Novel by

EDGAR RICE BURROUGHS

Beginning in the March issue of

THRILLING ADVENTURES

NOW ON SALE 10c AT ALL STANDS

MEN and WOMEN WANTED

NOW YOU DON'T HAVE TO SEND ONE PENNY TO GET THIS BIG MONEY MAKING OUTFIT

IT'S FREE!

OWN A FINE PAYING NEIGHBORHOOD FOOD ROUTE

If you want to better yourself—if you want cash to spend—money to save—the means to live in comfort—let me show you your big chance! To an honest, reliable man or woman in any open locality I will give—FREE—everything needed to start a fine paying neighborhood Food Route, with profits your very first day and all year 'round. You don't send me one penny! You must realize that I certainly would not offer this big expensive Outfit FREE unless I had complete confidence in the splendid money-making opportunities of my remarkable Plan!

You need absolutely no experience. My simple, proven Plan offers you a wonderful opportunity to make good money right from the start in a simple, dignified business of your own. You handle fast-selling, quick repeating home necessities—things people must buy, such as coffee, teas, delicious foods and over 100 other necessities—all guaranteed to satisfy or money back. Your home is your headquarters. You have no investment for store rent, light, fixtures or big stocks of goods. You handle all the money and keep a liberal share for yourself. In fact, your average gross profit is from 30 to 40 cents on every dollar you take in. Once you start, under my liberal credit plan, you can operate on my capital.

Splendid Cash Profits

You owe it to yourself to write and see what wonderful success so many others have enjoyed with this time-tested money-making Plan. Let me mail you full particulars—then you can judge whether you want to start right in making money at once.

I Send Everything

I not only give you free the Complete Outfit shown here, containing a big assortment of full-sized packages, but also give you a simple, sure-fire Plan. I give you advertising material, trial-size samples to give away, and everything else you need to start earning money your very first day.

Get Full Particulars!

This is a sincere offer made by a big, reliable, old-established company operating from Coast to Coast. Write at once for full particulars. Unless you take advantage of my remarkable Free Outfit Offer now, you may be missing the very money-making opportunity you have been looking for. Strike out for yourself! Be independent! Make money! Enjoy life! Remember—you don't send me a penny. Just fill out and send the coupon and I will mail you full particulars. Do this TODAY!

E. J. MILLS, Pres., 1608 Monmouth Ave., Cincinnati, O.

RUSH COUPON for FREE OFFER

Mr. E. J. MILLS, President
1608 Monmouth Ave., Cincinnati, Ohio

Without the slightest obligation on my part please mail me full particulars about your offer of a Complete Free Outfit, and how you will help me get started at once in a fine-paying neighborhood Food Route.

Name.....

Address.....

.....

(Please Print or Write Plainly)

GET RELIEF FROM YOUR

RHEUMATISM

ARTHRITIS OR NEURITIS WITH

HOT SULPHUR BATHS

In Your Home. Like Natural Hot Sulphur Baths

Here at last, benefits similar to the world-famous natural Hot Sulphur Baths—never before possible at home—can now be yours with SULFURAID-21. Try this marvelous new scientific achievement on our money-back guarantee. Send us your order for the Full Course of 21 SULFURAID baths. If, after giving them a thorough test, you are not relieved of your aches and pains, return the unused part of the treatment, with the empty vials, and YOUR MONEY WILL BE REFUNDED.

You simply empty ONE vial of SULFURAID-21 in a tub of hot water and let Nature do the rest. That is all. Results will speak for themselves. You will be delighted.

So why suffer any longer when the blessings of Hot Sulphur Baths can be yours at a fraction of what it costs to take them at the leading Spas of America and Europe? Write for our FREE booklet. Tells how nature's secret of the ages was solved for all mankind to enjoy.

Mail your order at once. The Full Course of SULFURAID, consisting of 21 vials, costs $10.00. 10 vials, $6.00. **Trial offer of 3 vials, $2.00.** Send check, cash or money order to **BAER LABORATORIES, Inc., Desk VM, 30 East 20th Street, New York City.**

HIDDEN WEALTH MAY BE YOURS

if you know what to look for in old coins. We pay big cash prices for wanted coins. Certain 1909 cent, $10; some silver dollars, $4,000; 1864, 1865 Indian head cents, $100 each; dimes before 1895, $600; liberty head nickels before 1914, $500; encased postage stamps, some large pennies, $2,000; half cents, $275; paper money, gold dollars, $1,500; foreign coins, $165; some worth $6,000 each. It will pay you to be posted. Send 15c today for big illustrated catalog. National Coin Corporation, Uninc. (7) Daytona Beach, Fla.

NEW ASTROLOGY JEWELRY!

Matched to your birth sign. Mysterious. Beautiful. Accents your personality. May bring you luck! Star design, or Locket Brooches. FREE Gift Box and Astrological Analysis. Postpaid. Send $1.00 and Birthdate TODAY! Money back guarantee. ASTRA, American Products, Dept. TG-1, P. O. Box 655, Indianapolis, Ind.

Thompson BEATS the World on BOATS

Better Built—Lower Prices

Canoes, Rowboats, Outboard Motor Boats, Olympic, Snipe, Comet and Sea Gull Sail Boats

CATALOG FREE

Save Money—Prompt Shipment—Two Factories.

THOMPSON BROS. BOAT MFG. CO. (81)

253 Ann St. PESHTIGO, WIS. (Write to either place) 183 Elm St. CORTLAND, N. Y.

Read Our Companion Magazine

TEXAS RANGERS

NOW ON SALE 10c AT ALL STANDS

LIGHTS ITSELF

SELLS ITSELF

Quick Action (1940) Perfected

Self Starting Lighter

Lights cigar, cigarette or pipe—instantly. Never fails. IMPROVED PRINCIPLE IN IGNITION. No flint. No friction. Send 25c for sample and large can of fluid. Start now. Agents report big earnings.

NEW METHOD Mfg. Co.

Mfrs. of No Flint Automatic Gas Lighters

Box TG-87, Bradford, Pa., U. S. A.

Lights Easily in the Wind

Packed in DISPLAY BOX

25c Retail

Doz. $1.75

Gross $18.00

READ our new companion scientifiction magazine featuring the exploits of the Solar System's most adventurous planeteer!

ASK YOUR NEWSDEALER FOR

CAPTAIN FUTURE

WIZARD OF SCIENCE

NOW ON SALE 15c AT ALL STANDS

Now! A New Issue of

THRILLING WONDER STORIES

—Every Month!

THIS OUTSTANDING MAGAZINE IS NOW PUBLISHED MONTHLY INSTEAD OF BI-MONTHLY AS FORMERLY

15c AT ALL STANDS

13

Complete Stories in Every Issue of Our Companion Magazine of the Weird and Supernatural

STRANGE STORIES

NOW ON SALE 15c AT ALL STANDS

MEET THE AUTHOR

Autobiographical Note

By HENRY KUTTNER

Author of "When New York Vanished"

Henry Kuttner

SOMEHOW the life of a writer is seldom as interesting or adventurous as the stories he writes. I know that's true with me, even though I've spent most of my life in California, where practically anything can happen. I was born in Los Angeles, to my intense satisfaction, and as a moppet spent most of my time sleeping under the counter of my father's bookshop. I absorbed sunshine and orange juice in vast quantities. Then I moved to San Francisco and absorbed fog, which I have loved ever since.

I attended the toughest school in Frisco, near Hayes Valley, and acquired several medals for various useless things, as well as a great many black eyes. Returning southward, I finished high-school and decided to join the Navy. I was persuaded not to do so. Instead, I went to work.

I've worked in a hardware store, on a cement gang (which has nothing to do with a chain gang), in a book-shop and in a literary agency. At present I'm a free-lance writer, and have given up the sunshine of California for the so-called climate of New York.

Habits? I dislike neckties and prefer scarfs. I like big, roomy shoes. I'm a chain smoker when I'm writing, and once I've started a yarn I seldom halt till it's finished. Other stimulants slow down my work, though black coffee is helpful sometimes. I am passionately fond of peanut-butter and bacon sandwiches. And I like overstuffed chairs.

I dislike driving, but nevertheless go on long, arduous jaunts in my jaloppy. I seldom am able to sleep until I've read at least one book a night.

Writing "When New York Vanished" was a lot of fun, and I hope it will give the readers of *Startling Stories* a few pleasurable moments!

Read STARTLING STORIES Every Issue

STAY

a wage-slave

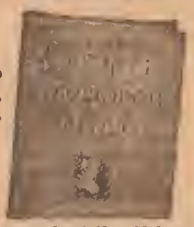
IF *you wish*

BUT-

DON'T you wish you were like some of your friends who are forging ahead while you stay put? Like it or not, people size you up by what you earn. Is their sizing flattering to you? —Why not *plan* to get ahead, to make more money, to get a raise? If you don't know how, perhaps we can aid you as we have so many others. Chances are good that we can help you *boost yourself up* in ways you never thought of. —Thousands will gladly tell you how our planned training helped them—directed their work along *charted* paths to business success, bigger earnings, 10%, 20%, 50%, some even 100% and 200% greater income . . . At any rate, let us send you the inspiring book "Ten Years' Promotion in One." It's FREE! It will surely help you *plan* your next raise whether you ask us to *help* you plan or not. Write us today for the book—the coupon is for your convenience.

LASALLE EXTENSION UNIVERSITY

A Correspondence Institution



Dept. 8329-R Chicago

Please send me full information regarding the training and service I have marked with an X below. Also a copy of "Ten Years' Promotion in One," all without obligation to me.

☐ **Business Management:** Training for Official Managerial, Sales and Departmental Executive positions.

☐ **Modern Salesmanship:** Training for position as Sales Executive, Salesman, Sales Coach or Trainer, Sales Promotion Manager, Manufacturers' Agent, Solicitor, and all positions in retail, wholesale or specialty selling.

☐ **Higher Accountancy:** Training for position as Auditor, Comptroller, Certified Public Accountant, Cost Accountant, etc.

☐ **Traffic Management:** Training for position as Railroad, Truck or Industrial Traffic Manager, Rate Expert, Freight Solicitor, etc.

☐ **Law:** LL. B. Degree.

☐ **Stenotypy:** The up-to-date method for secretaries and court and convention reporters.

☐ **Modern Foremanship:** Training for positions in Shop Management, such as that of Superintendent, General Foreman, Foreman, Sub-Foreman, etc.

☐ **Industrial Management:** Training for positions in Works Management, Production Control, Industrial Engineering, etc.

☐ **Modern Business Correspondence:** Training for Sales or Collection Correspondent, Sales Promotion Manager, Mail Sales Manager, Secretary, etc.

☐ **Stenography:** Training in the new superior machine shorthand, Stenotypy.

☐ **Expert Bookkeeping** ☐ **Railway Accounting**

☐ **Business English** ☐ **Effective Speaking**

☐ **Credit and Collection Correspondence** ☐ **C. P. A. Coaching**

☐ **Commercial Law**

Name.....

Present Position.....

Address.....

Cash When Sick

Over 120,000 People Have Already Provided a Cash Income Up to $100 a Month

Sick benefits up to $100 a month when you are laid up from ANY kind of sickness will he paid under a New health policy now issued by the National Protective Insurance Co.

Men from ages 18 to 69 and women from ages 18 to 59—whether employed or not—and who are now in good health are aligibla. No application to fill out. No medical examination required.

Sickness strikes suddenly and unexpectedly. It always causes greatly increased expenses and usually a reduced income. Over 120,000 people have already bought National Protective health policies. Over one and one-half million dollars have been promptly paid in benefits to policyholders.

SEND NO MONEY. Just write your name, address, age and sex to National Protective Insurance Co., 3001 Pickwick Building, Kansas City, Mo., and they will mail you a policy for 10 days' Free Inspection. See the policy first and if you are satisfied, then send us $3.65 to pay the premium for nearly five months. This offer is limited, so write today.

Sends Treatment for

ASTHMA

Paroxysms on Free Trial!

I will send any sufferer a regular $1.25 hottle of Lans's Treatment by prepaid mail. Used by thousands and this bottle does not cost you a single penny until you are relieved—then only $1.25. If not your report cancels charge.
D. J. LANE. 269 Lans Building, St. Marys, Kansas

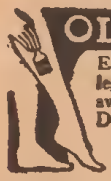
Start A POTATO CHIP Business In Your Kitchen!

MAKE MONEY! Buy potatoes at 2c lb. — make Sensational new "Greaseless" Potato Chips, and sell for 35c a lb. Big money spare or full time. No experience needed. I tell you how to get stores to sell for you—how to make profit first day. Small investment buys complete equipment. Write for FREE FACTS today!
G. H. HAROT, 620 N. Michigan Avenue, Dept. F-293, Chicago

SONG POEMS WANTED
TO BE SET TO MUSIC
Free Examination. Send Your Paems to
J. CHAS. McNEIL, MASTER OF MUSIC
510-TF So. Alexandria Los Angeles, Calif.

WE MATCH PANTS ToAnySuit!

Double the life of your coat and vest with correctly matched pants. 100,000 patterns. Every pair hand tailored to your measure. Our match sent FREE for your O. K. before pants are made. Fit guaranteed. Send piece of cloth or vest today.
SUPERIOR MATCH PANTS COMPANY
209 S. State St. Dept. 982 Chicago



OLD LEG TROUBLE

Easy to use Viscose Method heals many old leg sores caused by leg congestion, varicose veins, swollen legs and injuries or no cost for TRIAL. Describe your trouble and get FREE BOOK.
T. G. VISCOSE METHOD COMPANY
140 N. Dearborn Street, Chicago, Illinois

FALSE TEETH

LOWEST PRICES

90 DAYS' TRIAL

If you need teeth, but do not care to spend much money, Write about my Method and LOW PRICES. You MUST be 100% SATISFIED or I will refund your money any time within your 90 day trial. I have many Satisfied Customers in United States and Canada. MY METHDO IS FOUNDED ON 30 YEARS' EXPERIENCE.

SEND NO MONEY

WRITE TODAY for FREE BOOKLET and MATERIAL.
DR. CLEVELAND DENTAL LABORATORY
Dept. 2-CO, 503-05 Missouri Ave., East St. Louis, Ill.

REVIEW OF THE SCIENCE FICTION FAN PUBLICATIONS

(Complimentary sample issues of fan journals listed here are available to readers. When requesting your specimen copy, please enclose a three-cent stamp to cover postage. Address your requests to the individual fan magazine editors, and please mention STARTLING STORIES.—Ed.)

SPACEWAYS. 303 Bryan Place, Hagerstown, Maryland. Edited by James Avery and Harry Warner, Jr.

Latest issue of this journal begins its second year. Choice assortment of fact, features and fan highlights gathered by editors make this number a "must." Fiction by Amelia Reynolds Long and others. Nine departments, verse and what have you round out the table of contents. "Stardust," by The Star-Treader, a department of candid comment on news and views pertaining to sclentifiction, continues as top feature in this gazette.

* * *

NEW WORLDS. 17 Burwash Road, Plumstead, London, S.E. 18. Edited by Ted Carnell and A. C. Clarke.

Bombs bursting through air, and though o'er the ramparts they watch, the Britishers carry on with their fan mags in the rocket's red glare. Good adult presentation in NEW WORLDS, with a variety of articles and fiction by fandom's headliners. Keen satire here, with back cover of current issue deserving of a whole corsage of orchids. Editorial foreword with each article seems to be new in fan mags, and does very nicely here.

* * *

GOLDEN ATOM. 57 Lyndhurst St., Rochester, N. Y. Edited by Larry B. Farsaci, Francis J. Litz, Elmer E. Weinmann, Rosana Barson and Bernard A. Seufert.

New mag. First issue. Okay format. Interesting articles—by Dale Tarr, Fred W. Fischer and Stella River. Announces a companion mag, SCIENCE FICTION FANDOM, which promises a line-up that lifts the eyebrows. Give this a once-over.

* * *

FANTASCIENCE DIGEST. 333 E. Belgrade St., Philadelphia, Pa. Edited by Jack Agnew and Robert A. Madle.

Big thirty page issue, with timely, diverting articles by leading fanwriters. Professional tone to this sheet, with material well presented. Robert A. Madle's quiz should interest those who have been bidding for scientificion quizzes. All in all, required reading.

* * *

THE FANTAST. 2444 Desborough Road, Eastleigh, Hants, England. Edited by C. S. Youd.

Verse, fiction and articles. Twenty pages, and manages to keep up with its U. S. A. competitors. John F. Burke's piece, "Conversation in a Spaceship," rather amusing. Ditto for readers' letters in this number.

* * *

SCIENTIFAN. 1836 39th Ave., Oakland, Calif. Edited by J. J. Fortier, Paul X. Savage, Robert Millar and James Bush.

Biggest issue of the month here—forty-two pages. Features a pretty good fantasy short

by W. Lawrence Hamling, "The Finger." Sam Moskowitz, Robert W. Lowndes, Edgar Rice Burroughs and many others among contributors. Index of old fantasy classics from general fiction magazines a valuable department of this journal. Bob Tucker, the Benchley of scientifiction, adds mirth to the issue.

* * *

AD ASTRA. 3156 Cambridge Ave., Chicago, Ill. Edited by Mark Reinsberg, Erle Korshak, Leslie A. Croutch and Richard I. Meyer.

Edward Elmer Smith's vitriolic blast at professional editors feature article here. Chapter and verse would have helped to make his piece convincing. Issue includes other articles by fantasy's literary limelighters.

* * *

FANTASY-NEWS. 137-07 32nd Ave., Flushing, N. Y. Edited by James V. Taurasi, Sam Moskowitz and Mario Racic.

The all-important handbook and who's who of scientifiction, as necessary as the alphabet to a dictionary. Prints all the inside and outside fan news, pro mag news, fantacinema dope, futuradio info, etc. Packs fifty thousand watts of startling facts and scoops. Weekly, winsome, and wonderful.

* * *

SCIENCE FICTION COLLECTOR. 1700 Frankford Avenue, Philadelphia, Pa. Edited by John V. Baltadonis.

Attractive cover illus. on this compact s-f fan mag. In the main, material is interesting. However, there's too much space devoted to petty political arguments between fans. Seems to be out of order.

* * *

LUNA. 11 Northumberland Street, Clevelly, Sydney, Australia. Edited by V. Johsworth.

Here's Australia's best fan-mag. First issue of this large-sized, neatly presented pub is worth looking over. Eric Frank Russell's article on time traveling good. Contains other articles and fiction.

* * *

FANTASCIENCE DIGEST. 333 E. Belgrade Street, Philadelphia, Pa. Edited by Robert A. Madle, Jack Agnew and Fred W. Fischer.

Current issue rings the bell as the best of this month's crop of fan mags. Well-diversified number, with lively articles by John F. Burke, Donald Wollheim, Sam Moskowitz, and Harry Warner, Jr. Orchids to Ray Bradbury for his frolicsome article, "Why Ghouls Leave Home." It's the funniest fantasy piece of the year. Mag contains quiz department, reader's letters, news, candid comment. Put this journal on your calendar.

* * *

POLARIS. 404 S. Lake Ave., Pasadena, Calif. Edited by Paul Freehafer.

Devoted to the publication of weird fiction—with contribs by Duane W. Rimel, Robert W. Lowndes, and Harry Warner, Jr. Not bad. Welcomes material from its readers. So why not try Polaris?

* * *

FANFARE. 125 West Sixth St., South Boston, Mass. Edited by Francis Paro, William Zimmer and Harold V. Gruhn.

Another first issue. Fair. Mag will have to develop individual features. Routine material so far. Second issue probably better.

Best Mystery Thrillers in
THRILLING DETECTIVE
NOW ON SALE 10c AT ALL STANDS

If you like to draw, test your sense of design, color, proportion, etc., with our simple Art Ability Test. An opportunity to get a frank opinion, *free*, as to whether your talent is worth developing.

Magazines, newspapers, publishers and advertisers spend millions yearly for illustrations. Design and color influence the sale of most things we buy. Artists have become important to industry. Machines can not displace them. If you have talent, train it. Drawing may be your surest road to success.

The Federal Schools, affiliated with a large art, engraving and printing institution, has trained many young men and women now serving industry as designers or illustrators, capable of earning from $1,000 to $5,000 yearly. Its Home Study courses in Commercial Art, Illustrating and Cartooning, contain exclusive illustrated lessons by many famous artists. Practical instruction by experienced men is the reason for its many years' outstanding success. Courses sold on easy payments.

Send today for Art Test and Free Book explaining present opportunities in art. Just fill out and mail coupon below.

FEDERAL SCHOOLS, Inc.
3630 Federal Schools Bldg.
Minneapolis, Minn.

Send me, without obligation, your Art Test and Free Book.

Name.....
Address.....
.....
Age.....Occupation.....

WHEN NEW YORK

Madness rules when the world's greatest city is catapulted into another dimension—while civilization ponders the enigma of a lost metropolis!

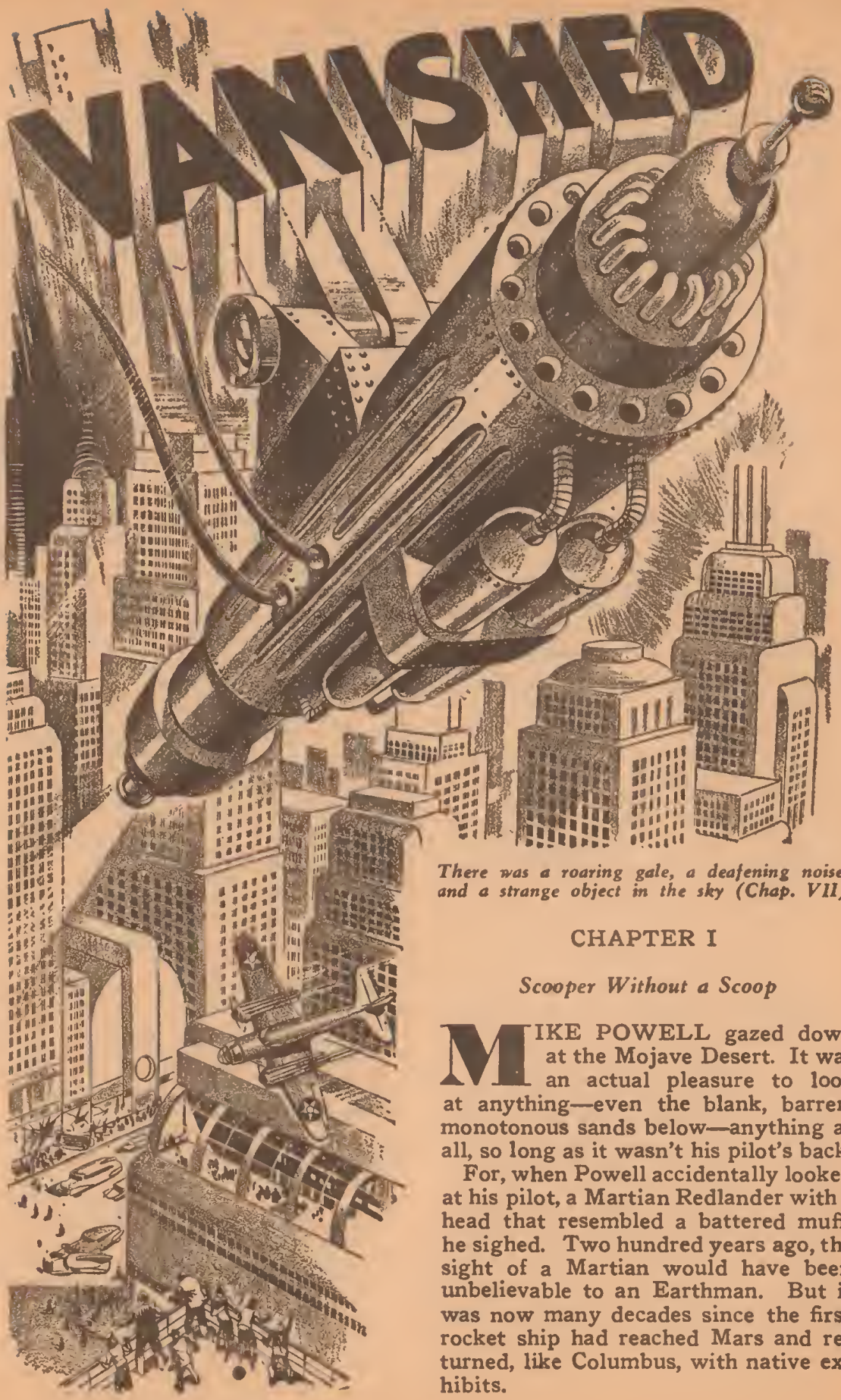
•

A COMPLETE NOVEL

By

HENRY KUTTNER

Author of "The Star Parade," "Suicide Squad," etc.



There was a roaring gale, a deafening noise, and a strange object in the sky (Chap. VII)

CHAPTER I

Scooper Without a Scoop

MIKE POWELL gazed down at the Mojave Desert. It was an actual pleasure to look at anything—even the blank, barren, monotonous sands below—anything at all, so long as it wasn't his pilot's back.

For, when Powell accidentally looked at his pilot, a Martian Redlander with a head that resembled a battered muff, he sighed. Two hundred years ago, the sight of a Martian would have been unbelievable to an Earthman. But it was now many decades since the first rocket ship had reached Mars and returned, like Columbus, with native exhibits.

Powell's pilot, like all Martians, had lots of hair. It protected him from the sandstorms of the red planet. But why in hell this particular Redlander refused to shave, or even get a haircut, Powell could never understand.

"Hector," he said disgustedly, "you look like a weeping willow. How about getting that rubbish at least trimmed?"

Surprisingly, the Martian turned his head completely around on what evidently was a universal-jointed vertebra. Seen from this vantage point, his face was even less attractive. A tangled wilderness of blue-black hair confronted Mike Powell. The ace cameraman shuddered.

"Soon, yah," said Hector in a squeaky voice. He bounced the plane through an air pocket and giggled with happy satisfaction.

Powell sighed again. "Soon—*yeah!*" was what Hector might have meant if he'd been capable of irony. Agreement or irony, he wouldn't get a haircut.

Very often, Mike had been tempted to destroy the giggling Hector. Martians were not noted for their intelligence. They were willing enough, but childish in some ways. Now, for example, Hector sighted a buzzard circling nearby, and turned the ship from its course in a mad attempt to run down the frantic bird. Powell spoke sharply and profanely. Hector subsided without even a meek protest.

In a way, Mike was attached to his man-of-all-work. He had picked him up on Mars, during the annual carnival at Tycho City, the time the Earthquake shook down half the metropolis. His assistant cameraman had fallen down a crevasse, which closed above him; and Mike badly needed someone, anyone, to pack his equipment as he raced about, filming shots of the toppling city for Summit Newsreels. He had seen Hector chasing a dog along a crumbling street, and promptly captured the Martian. Ever since, the two had been together, filming Earth, Mars, Venus, and whatnot.

HECTOR didn't mind anything, even being dragged into a depilatory to have his shaggy growth of body hair removed.

"That's so you'll look less like a gorilla—maybe," the cameraman had explained; and Hector shook with exquisite merriment.

However, the Martian was, in his way, rather vain. Many a hirsute Redland maid had twined fond fingers in the bushy mop that hid whatever countenance he might have had. Among the ladies of his tribe, Hector was accounted a handsome man. For him to shave his face would have lost him his crowning glory. Also, Hector implied, it was indecent. A modest man doesn't ever expose his face in public.

Hector's richest possession was a collection of mirrors, which he would stare into for hours, ruffling his whiskers and indulging in a gruesome display of Narcissism. Still he was loyal, if not very bright, and he could follow orders.

"We're here, Hector," Mike said, casually lighting a cigar. "Wheel out the gyros."

The helicopter props began to revolve, slowly lowering the craft to the mountainous region directly below. Powell gathered his equipment, checked his cameras, and pointed out to Hector the exact spot where he wanted to dismount. Beyond a low ridge was a crudely-built hangar; the plane dropped out of sight of it. The wheels bumped the ground.

Powell jumped out. "Okay," he told Hector. "You know what to do, eh?" He glanced at his watch. "Check with me."

The timepieces tallied almost to the second.

"Good. Do exactly as I told you. If you slip up, I'll strangle you with your own whiskers."

Hector shrieked with laughter. Giggling, he somehow got the plane into the air and precariously wobbled off. Powell looked after him, scratching his head.

"How things like that could ever survive to evolve, even on Mars—" he mused, and then gave up. Time was going swiftly. Carlin Eberle would be starting his space flight soon. And that was something that had to be canned. Powell hiked up toward the ridge.

As he topped it, he saw beneath him a low, wide valley. In its middle was the hangar. For almost half a mile around the structure was a flat, empty plain girdled by a wire fence. A knot of figures were gathered at a knoll some distance away, outside the barrier. Powell moved toward them, his long, rangy figure eating up the distance with swift strides.

The sun was setting as he reached the mound. Cool purple shadows folded over the mountains.

"Here's the Brain," somebody said. "Hello, Brain."

"Greetings, vultures," Powell said absently. "Am I late?"

"Mike Powell is never late," the same voice observed.

It came from a small, remarkably pretty young woman with crisply curling red hair, and the explosive gleam of disintegrating radium in her green eyes. She wore jodhpurs and a khaki blouse. As she greeted him, she held a camera, which she was preparing for action.

"Sue Clark!" Powell said. "Fancy meeting you here."

The girl bowed. "One of your rivals and competitors, among so many others. No chance to get a scoop here, Brain."

"Summit Newsreels gets scoops anywhere. Summit Scours the System!" Mike declared. "We even get to Ganymede."

Sue Clark winced. "That was a dirty trick," she accused hotly. "You bribed my pilot to go off the course. No wonder you scooped me!"

"Calm down," a deep voice said. "He won't scoop us tonight. Right now, Powell's just one of the boys."

But the voice had a hopeful quality, as if he were praying. There was ample reason for him not to believe his own statement.

DESPITE the fact that Mike Powell was one of the few men to have a newsreel by-line, he was well known only among the newsgatherers of the System. But, in that exclusive circle, the name of Powell meant something. It meant a scoop, in capital letters.

His rivals called him lucky. But even

MIKE POWELL

they admitted, if only to themselves, that it wasn't luck. Powell had played with film in his cradle, and he saw with the eye of a camera.

"If a man bites a dog, it's news," one disgruntled reporter had once muttered savagely, and achieved notoriety by adding: "And if Mike Powell is on the job, it's a scoop!"

For, when the luxury spaceliner *Astarte* was raided and wrecked by pirates in the Asteroid Belt, Powell alone was there. He'd stowed away on a police ship and canned the shots the authorities were trying to suppress for political reasons.

When Hanson Birch, the explorer, entered the crater of Vesuvius in a special heat-resistant suit, Powell stole the armor on his return and duplicated the feat. But he filmed it at the same time!

Dr. deVere Summers made a nearly disastrous flight, aimed at skirting the Sun's chromosphere. Powell was with him. He almost died of severe radiation burns; but he got his scoop!

Remember when the madman Flogarth stumbled his crackpot rocket ship beyond Pluto in a crazy try at reaching the speed of light? Naturally you do. For it was Mike Powell who took you

along with him, by camera-eye, in his flimsy one-man cruiser race outside the System to film the shattered wreckage of Flogarth's vessel.

"That guy isn't a man," one of Mike's rivals had said, after being hopelessly scooped. "He's a camera—a camera on rockets!"

That outclassed rival was Lynn Plumb, to whom Mike had just turned.

"Lynn!" he said with exaggerated friendliness. "Lynn Plumb, in the flesh. Say, this is getting to be a regular reunion."

Plumb was Sue Clark's assistant. They formed a newsgathering team that nobody could beat—except the team of Powell and Hector. Suddenly remembering the Martian, Sue inquired sweetly about him.

Mike's face seemed to sag. He looked aside, unwilling to meet her searching gaze.

"Gone off," he said embarrassedly. "I sent him to get—er—something I forgot."

Sue's green eyes gleamed. "Why, maybe I can help, Brain. What was it?"

"You mean it? I'm in a spot. I sort of forgot my telephoto lenses—"

"Don't tell me you forgot those! You knew Eberle wouldn't let us get within half a mile of the ship."

The man looked uncomfortable. "It was just one of those things. Last minute call. You know. Have you got an extra lens?"

"Of course, Brain," Sue said kindly. From her pocket she carefully withdrew a leather case, opened it, and removed a large gleaming object. "Is this what you want?"

"Gosh, thanks!" said Powell, reaching for it. "You're a pal."

"Hey!" Lynn Plumb interjected. "Don't give it to him, Sue." The man's plump, round face was startled.

"I don't intend to," said Sue, replacing the lens in its case. She ran a slim hand through burnished red hair. "Go peddle your papers, Brain. Go away and die."

"A fine thing," Powell said bitterly. He appealed to the other cameramen. "Hasn't anybody got a lens to lend me?"

RAUCOUS laughter answered him. Every one of those present had, at one time or another, been scooped by Powell. They were having their revenge and enjoying it. By this time it was dark. A full moon rose golden above the mountains. The hangar in the distance remained silent and unlighted.

It was almost time for Carlin Eberle to take off on his epochal space flight—unless his plans had miscarried. Deliberately the man had shunned publicity. But the underground grapevine had put newsgatherers on the track.

It was well known that Eberle was planning to make use of a new type of propulsion, something that would revolutionize space travel. It would make rockets obsolete, he hinted. He spoke of lines of force and gravitational repulsion. The cheapest and best rocket fuel would be useless compared to the Eberle method. And tonight was to be the final test.

A dark figure came into view, loping across the fields from the direction of the hangar. It halted at the electrified fence and called softly. The camera-crew glanced at one another, puzzled. Then, by common consent, they hurried down the mound, gathering near the new arrival.

In the moonlight they saw a burly, unshaved man in greasy overalls. He looked at them furtively.

"Well?" Sue asked. "What's up?"

The man seemed to make up his mind. "Listen," he said in a whisper, "I got some dope you'll want to know. About the take-off."

"Let's have it," Powell said.

The man held out his hand and looked at it speculatively. "My dope's worth money. Because if you don't get it you won't get any pictures either."

"I think he's bluffing," Sue said.

"Shakedown, eh?" Lynn Plumb grunted, his round face set in a scowl. "No soap, bud."

The man shrugged. "Okay. But Eberle isn't taking off from here. He doesn't want any witnesses. We moved the ship a few days ago to—"

"Where?" Powell asked eagerly.

A grimy palm was extended under his nose. "The take-off's almost due,"

the man said, and involuntarily his eyes flickered up to the east.

"I don't know," Sue said slowly, following his gaze. "Maybe—"

In the eastern sky, beyond the mountain ridge, white light blazed up with the fury of a volcanic eruption!

CHAPTER II

Payment in Bombs

LYNN PLUMB leaped into action. "Back to the ship, Sue!" he yelled, and snatched up the camera he had put down. The girl was already running fleetly up the mount.

"I'll get the stuff," she flung back over her shoulder. "Start the motor. We may be in time!"

The others dispersed in flurried haste. Powell ran after Sue, helped her pick up the equipment. She snatched it from him and raced down to where her gyroship waited. The propeller

was already turning. Plumb was bouncing impatiently in the pilot's seat. Sue hurled objects into the cockpit and leaped after them.

"Hey!" Powell shouted above the roar. "What about me?"

"Gun her, Lynn. What about you?"

"Hector's got my ship! I'll be scooped."

"No!" Sue said sweetly. "Not the Brain. Impossible!"

She stuck out the tip of a small red tongue at him and waved ironically as the gyroship took the air. All around motors were thundering and pounding. In a single swarm, the planes lifted, darted swiftly toward the white flame still flaring beyond the mountains.

Powell returned to the fence, where the overalled man waited.

"Nice work," he said. "Here's your other hundred, fella. You're a good actor."

"Thanks." A bill was pocketed. "I didn't think they'd fall for it till that light showed up over there. How'd you do that?"

"I've got an assistant," Powell said cryptically. "He hasn't much sense, but he knows how to light magnesium flares. When's the take-off?"

"Any time now. I better be getting back."

"Luck," Powell said, and waved at the departing figure.

Grinning broadly, he set up his camera, slipped on an infra-red auxiliary filter, and found a telephoto lens in his pocket. Sue would be far from happy when she discovered the trick. Still, all was fair in love, war, and newsreel work.

The top blew off the hangar. The walls fell out and collapsed. For a second Powell had a glimpse of a squat, gleaming projectile squatting hugely before him. He bent over his camera, working frantically. In the scanner he could make out no details, but he knew that the lens would miss nothing.

A blast of roaring, screaming wind tore at his body. The projectile flashed into the skies and was gone.

That was all.

The hurricane subsided. Absently, Powell rolled another minute's film through the grinder, halted, began to put his equipment together. The can of film he locked securely and tucked under his arm.

An airplane muttered and coughed above him. Hector was apparently returning. Powell waved.

HECTOR

A bullet whistled past him and dug into the ground at his feet.

FOR a second Powell had the mad idea that Sue had returned to seek vengeance. Then sanity returned. It wasn't Sue hovering above him, a dark silhouette in the moonlight, but a killer.

Powell dropped everything but the can of film. He ran, bending low, dodging the burst of bullets that pursued him. It isn't easy to aim from a moving plane by moonlight. That fact alone saved Powell's life.

He plunged into the knoll's shadow, doubled on his tracks, and hid under a bush. The dark craft swept around, seeking him out. Bullets spattered with low, murderous thuds into the soil. There was the sharp crack of lead splitting rock.

Powell curled up into a ball, shielding the can of film with his body, and wondered what in hell to do. The bullets might find him. Then, again, they might not. If he fled, though, his moving body would be a visible target.

"Nice fix," Powell muttered, and discovered that a hard object was digging into his ribs. Cautiously, he fished out a flat brown bottle.

"Rotgut," he said, "make me forget, or at least ignore this nonsense."

Somehow the sound of *thwacking* bullets didn't seem quite so disturbing with raw bourbon burning its way down Powell's throat.

Another plane came out of the east. Powell's attacker hesitated, let out a final spurt of ammunition before scooting off.

Hector set down his ship near the knoll and emerged, his blue-black, furry head shining in the moonlight.

"Boy, oh boy!" Mike cried. "Ugly, you're the most beautiful sight in the Universe to me. Get going. Headquarters, Los Angeles."

Hector seemed pleased. His misproportioned body was shaking with merriment. The aircraft veered perilously.

"Mind the controls," Powell snapped. "What's the matter with you, fathead? What kept you?"

"Killed a buzzard," he giggled. "Fun, oh boy, you say it!"

"So you take time off to fly down buzzards while I'm being shot at," Powell said bitterly.

But he removed his cap and shied it into a corner. Pulling off his boots, loosening his belt, he relaxed with a deep sigh. The night's job was over. All that remained was to deliver the can of film to local headquarters.

The plane passed far above a group of aircraft driving madly in the opposite direction.

"Summit Scours the System," Mike declared smugly. Hector applauded with a shriek of laughter. "Oh, pipe down, mop-face. Stick to your throttle. We haven't checked in the film yet."

HE knew it practically was on the screens, though. They flew over Angeles Forest, San Bernardino, and at last Glendale.

As Powell dismounted, he was still wondering about the identity of his attackers. But that question wasn't as important as delivering the film. Hector ran the length of the airport alongside him. The Martian's huge feet, shaped like snowshoes, hit the turf with resounding whacks. A taxi swung out toward the running men.

"Summit Building," Powell ordered,

scrambling inside. "Burn up the pavement, Bud."

The cameraman fell back in a corner, smothered by the tangled awkwardness of Hector, who had managed to squeeze his huge bulk into the automobile. The driver jerked the car into motion.

At the Summit Building they burst into the main office, confronted a small, startled man who rose like a frightened jack-rabbit from his desk.

"Scoop, Nickelson," Powell stated. "Catch." He tossed the can of film at the rabbity man, who deftly caught it. Nickelson's lips twitched in a smile.

"The Eberle take-off, eh?" he asked.

"Exclusive," Powell nodded. "Develop it right now, will you? I've an idea—don't ask me what. Got to see the print first."

"Sure," Nickelson said. "Stick around, Mike."

He ran off with the film. Powell sank down in a comfortable chair. With incredible patience, he bit off the end of a cigar, lit it carefully, and began puffing. Hector flapped to the window on his huge feet and looked out down the blaze of light and color below.

"Nice bonus in this, Hector," Powell said. "I think so, anyway. What are you mooning at?"

"Nothing," the Martian responded absently. "Bonus? Money, hah?"

"Yeah. Lots of money. You can buy a whole raft of mirrors." Powell suddenly realized that Hector was gaping at his reflection in the glass of the window. "You'd like that, eh?"

Hector pivoted. His awkward form exploded into a blinding blur of motion. He charged across the room, lifted Powell, chair and all. Mike lost track of events. He found himself dumped behind a couch in the corner. Then Hector fell on top of him.

The window smashed in an uproar of light and fury. Flames of hell raved through the room. Everything was tossed around tempestuously. The couch tried to smash Hector and Powell through the wall. The uproar died.

"Bad, ah?" Hector understated.

DAZEDLY, Powell picked himself up. The room was a shambles. Desk and chairs were overturned and shattered. The walls were pitted and blackened. The carpet smoldered. The window was gone; in its place a ragged hole gaped. Through this gap came the sound of an airplane's motor swiftly retreating.

"Still after us," Powell said. "See who they were, Hector?"

"No," the Martian responded, shaking his somewhat singed head. "Airplane. Man in it. Masked. Trying to throw a bomb in here."

"Trying?" Powell repeated ironically. "Oh, hello, Nickelson. Don't mind us. We're just making ourselves at home."

"So I see," said the rabbity man, who had pushed his way through a hanging door. "What's up?"

"Somebody's after my hide. Don't know who or why. The films I canned tonight may tell me. Got 'em ready?"

Nickelson turned from the missing window.

"Yeah, they're ready. Come in and I'll run them off. Wait'll I televise the police, though."

Powell put his hand on the other man's arm. "Will you hold off till I see the run? I've a hunch."

"This is a police job."

"After. I want to see the prints first. Give me a break."

"Okay," Nickelson said. "Hector, go get the safety crew. Can't have a fire starting. Come on, Mike."

Powell, calmly puffing his cigar, followed Nickelson into the projection room and took his seat. His thin face was set. That was the one indication of his emotions.

"I'll use the infra-red," Nickelson said. "Better visibility."

A picture grew on the screen, curiously lacking in depth and perspective. The hangar, falling apart, bared the space ship. A bright line streaked heavenward.

"Slow it down!" Powell rapped out.

Beyond the hangar, now a mass of tumbled planks, a gyroship lifted slowly. The telephoto lens brought it into clear visibility.

Then, the film ran out; the picture vanished abruptly.

"Again," Powell said. "I want to focus on that gyroship. Use magnifica-

tion. Even slower this time."

Nickelson obeyed. Once again the plane appeared. Abruptly, it increased in size.

"More," Powell said.

Again the image was enlarged. The cameraman studied the screen. There were two men in the plane. The pilot was a man he did not recognize; the other face was familiar to him. He had photographed it more than once.

"Dr. Max Owen," Powell said quietly.

"Yeah," Nickelson seconded. "That's the guy. Big-shot electro-physicist. Lives in Chicago. What's the angle? He's not connected with Eberle, is he?"

"Dunno," Powell grunted. "I'm going to find out. May be a scoop in it. Nickelson, I want you to do me a favor. Scrap the last part of that film. Don't show the gyroship at all. But save the print; stick it in the vault."

"Why?" Nickelson asked. "I don't get the angle."

"Evidence. Maybe. I'm going to see Dr. Max Owen. Somebody tried to kill me tonight, twice. That's something I don't like."

"Owen's no murderer, Mike."

"Maybe not. But I'm flying to Chi tonight with Hector, and when I get back, I may have a scoop."

Powell got up and left. He had a hunch he was running into a story—a big one. And hunches, he thought, were made to be played.

CHAPTER III

One Enemy or Two?

FOR centuries Chicago had been expanding into a giant city that strained up and out over Lake Michigan. Vast floating piers thrust into the smooth waters; the mighty span of a bridge reached across to the further shore. Powell, chewing a cigar and quietly cursing Hector in a low, monotonous undertone, let the erratic Martian chauffeur him in a rented autocar out Ninth Avenue to the floating section of the city.

They drew to the curb of a square metallic block set in a garden the size of a city block. This was the home of Dr. Max Owen.

Powell climbed out slowly, gazing without emotion at the vast, squatly designed house.

"See you later, Hector," he said. "Don't forget to televise me."

The Martian nodded his shaggy head, thrust the car into gear, and skidded away. Powell casually felt a slight bulge in his pocket and nodded with satisfaction.

A metal gate opened photo-electrically at his approach. He ambled along a winding path, and halted before a door in the front of the cube.

An opaque panel before him, two feet square, glowed wanly.

"Who is it?" a mechanical voice said.

"Michael Powell. Summit Newsreels."

"Your business?"

"With Dr. Owen."

There was a brief pause. Then the door slid into the wall. "Come in, please," the voice said.

Powell walked into a featureless hall of shining steel. He hesitated, staring around. Then the floor stirred under his feet.

It dropped.

Involuntarily, the cameraman cried out and grabbed for the gun in his pocket. But almost immediately he realized that this was merely an elevator. A bit abrupt, perhaps, but certainly not dangerous. Not as yet, anyhow.

Glistening blank walls seemed to slide up around him. The floor jolted and stopped without warning. A slit widened before Powell's eyes.

He looked through a rectangular gap into a luxuriously furnished office. Rich rugs, Bohkara and Turkestan, covered the oak floor. Colorful tapestries draped the walls. There was period furniture, of the 1940's, and behind a desk of glass brick a man was sitting. Rather, he was squatting.

For Dr. Owen was immensely fat. He bulged over the chair that supported him; his clothing strained at its seams.

Fat hung in pouches and bags on his hairless, sweat-shining face. Lashless, black, enigmatic eyes stared unwinking at Mike. Redly sensuous lips smiled

at the cameraman with a remarkably sinister lack of humor and warmth.

"I am always glad to see the press," he purred. "The newsreels, rather. In what way can I aid you?"

Before the cameraman could answer Dr. Owen waved a pudgy hand.

"I forget my duties as a host. Please be seated. A cigarette?" He extended a box toward Powell, who took a black, gold-tipped cylinder. As he puffed, it ignited automatically; a speck of platinum black in the tip made a match unnecessary.

POWELL sank down in a comfortable chair. He blew smoke through his nostrils and watched Owen. If the electro-physicist remembered his guest he made no sign. Sweat gleamed on the sagging jowls; the yellow hair, plastered back smoothly, shone.

Without preamble, Powell shot off his surprise.

"Last night I filmed Carlin Eberle's take-off," he said. "You're familiar with that, of course?"

"The Eberle experiment?" Owen nodded. "Yes."

"I was attacked from the air. Luckily, I escaped. But when I developed my film I saw, in the attacking plane, a man I recognized. I saw you, Dr. Owen."

"Indeed," the other said. "Are you certain?"

"I have proof," Powell observed. "The master print is safe. An attempt was made to destroy it—" He paused.

Owen was laughing. The gross face shook and quivered. The soft chuckle broke into a roaring bellow. Curiously, Powell felt a wave of apprehension sweep him. He waited, his eyes watchful on his host.

Owen sobered. He drew out a silk handkerchief and mopped his sweating cheeks.

"I apologize, Mr. Powell. Very bad manners on my part. But this proof you speak of, it does not exist. Look. I just received this on my telenews machine."

He thrust a ribbon of paper tape toward Powell, who snatched at it. Letters grew into words and those into

SUE CLARK

explosive sentences before his eyes.

"At noon today burglars entered the Los Angeles office of the Summit Newsreel Company, broke into the firm's storage vault and exploded thermite bombs to destroy the stock of master prints. Nothing was saved; no clues were left. The attention of employees was first drawn to the catastrophe by the blast of exploding thermite. The lock was destroyed. How it was has not been established; but the police promise an arrest within twenty-four hours."

Powell tossed the tape aside. Again the cold premonition of danger struck through him, which his lean face did not reveal.

"Odd coincidence, isn't it?" he said lightly.

"Very," Owen smiled. "If this master print you speak of was among those that were destroyed, it's—sad. Unless you have other prints. And I do not think you have."

Powell shrugged. "Okay. You weren't in the Mojave last night. It's my word against yours, and you're Dr. Max Owen. Still, when a man tries to bump me off, I like to know why. I'm funny that way."

"I do not think your life is in any

sort of grave danger, Mr. Powell."

The cameraman leaned back and exhaled smoke.

"I've got a hunch," he said quietly. "Eberle's new motive power for space ships must have been something pretty good. Good enough, maybe, to make rocketry absolete. The rocket companies wouldn't like that."

OWEN'S face remained immobile. Mike could find no clue on it.

"I may be wrong," Powell went on. "Somehow, I think I am. The rocket companies would rather play square, buy off Eberle if possible. Something else is behind this, something big. I can feel that. Big enough, maybe, to interest the IIB."

"The Interplanetary Investigation Bureau?" Owen asked slowly. "You think so?"

Powell played his ace. "Don't think you haven't left a trail," he said. "The Eberle stunt isn't the first one. We newsreel boys get around. The IIB will be definitely interested in what I've got to tell them."

Owen said nothing. He waited.

"I don't have to tell them, of course. Money talks." Powell was bluffing. He knew practically nothing; but the electro-physicist might be doubtful.

Owen heaved up his huge bulk.

"I dislike blackmailers," he said coldly. "I was not in that plane last night. However, you will please wait here. I shall return soon. You will find liquor in the cabinet on your left, the chromium one."

Powell watched him waddle through a door that slid up at his approach. The panel closed; the photographer was alone. He remained motionless for a moment.

From his pocket he withdrew a bulky pair of goggles, with thick, heavy lenses. These he adjusted over his eyes. He pressed the switch on a tiny portable battery. Crackling flashes of hazy light gleamed on the lenses. The room became indistinct.

Instantly, Powell rushed to the door through which Owen had vanished. It stayed closed, and he did not try to force it. Instead, he pressed the lenses closely against the steel, stained to imitate the texture and grain of wood, and waited.

At first he saw nothing. Then the fluoroscopic principle went to work: the wall seemed to melt away, and a dim cluster of shadows appeared. The adapted Roentgen rays of the apparatus probed through solid metal, revealing what lay beyond.

These X-ray goggles were something new, recently developed in the laboratories of Summit Newsreels. There were plenty of unusual devices in the Summit labs, not all of which had been released to the public.

The goggles had been created as adjuncts to cameras fitted with X-ray lenses. Their construction required months of painstaking craftsmanship under microscpes, but their chief virtue was small size and portability. It had taken research scientists years to compress X-ray equipment so compactly and efficiently.

Powell found vision far from good. He adjusted the focus, and still he could see little but the bulky outline of a tall box-shaped object. He recognized a televisor. It must have been that, in spite of its unfamiliar design.

BEFORE it stood the shadow of a man—gross, ungainly Owen, manipulating dials. Light glowed on the screen of the televisor. Hastily, Powell drew an enlarging lens from his pocket and slipped it over the left goggle, closing one eye.

A picture grew on the screen. Wavering and indistinct as seen through the fluoroscopic apparatus, nevertheless Powell could make out the seated figure of a man.

No, this was no man, but an automaton—a robot.

In the screen's depths Powell saw the man-shaped creature of dull metallic sheen seated behind a table strewn with maps, papers and charts.

He strained his eyes, trying to make out details. It was impossible. He saw only this vague impression of a metal body, a torso huge and cylindrical, surmounted by a globular head with great eyes. They seemed faceted, but Powell could not be sure. The lower part of

the body could not be seen.

Mike snatched a small black tube from his pocket and adjusted it. One end of the pencil-like object blossomed forth into a disk of pliant metal wires. The other end, a tiny capsule, Powell pulled off and unwound a length of conducting cord. The capsule he inserted in one ear.

This was a super-sensitive microphone, capable of picking up sonic vibration through a directional beam. Had a phonograph been playing at Powell's side, the mike, being focused on the televisor in the next room, would have transmitted not a note of music. And this, too, was a Summit device.

Vibrations of a voice, impinging on the wall, came through the microphone to Powell's ear. Faintly he heard Owen's voice.

"He's guessing. I think so, anyway. But he may have found out something—"

Another voice broke in, toneless, dispassionate, precise.

"He has found out nothing. He can know nothing of my organization or your part in it. Send him away. Eberle's ship will reach Venus soon and then my plans are made."

The televisor screen went dark. Powell leaped back, stuffing the goggles and mike into his pocket, as the shadow of Owen turned from the machine. When the physicist reentered the room, Powell was drinking whiskey neat and puffing on half a cigarette. He had broken off the other half and pocketed it before applying a match.

TO Owen's eye, it seemed as though Powell had not budged from his chair, save to secure a drink, since he had left the room.

Owen took his place behind the desk. He dabbed at his cheeks with the silk handkerchief.

"Well?" Powell asked.

Before the other could answer there was a low buzzing sound. Owen swung his body about and pressed a concealed button. Out of the wall a small televisor appeared as though by magic. Its view-screen was shimmering.

"Pardon," Owen said over his shoulder, and twirled a knob. The screen cleared. The face of Hector grew upon it.

"Mr. Powell, please, thank you," the Martian shrilled.

Owen seemed to hunch forward in his chair like some bird of prey. An ugly smile twisted his lips. He nodded to Powell, who rose and stood beside his host.

"Hello, there, Hector," he observed.

"I get bulls?" the Martian asked, relapsing into colloquialism. "You okay, boss?"

"I'll join you in half an hour," Powell said. "If not, you know what to do. See you soon."

Hector broke the connection. Powell turned to meet the masked stare of Owen's black eyes.

"You are careful, it seems," he said, "though a bit luridly melodramatic. All these precautions are unnecessary. I assure you I have no intention of harming you. You may leave now, if you wish."

"That all you got to say?"

"That is all," Owen said decisively. "Good afternoon."

CHAPTER IV

Pursuit in Space

IT took one hour to get to New York headquarters. Mike Powell took an elevator to the office of the big chief, M. H. Gwynn, who received him somewhat coldly. He was a well-fleshed, carefully-massaged executive who looked the part. He affected flashy tweeds and consistently smoked a briar pipe. Gwynn, as he often said, was just one of the boys. The boys had other names for him.

"In trouble again?" he asked when Powell burst into his office. "What's the matter now?"

"Listen, Chief," the cameraman said, restraining his impatience. "Did you hear about the thermite bombs going off in our L. A. vault?"

Gwynn winced. "I heard about it. A cool million it'll cost us, too, even though we're insured. What about it?"

"That bombing was staged to destroy a print I made of the Eberle take-off last night. I canned something—well, big. I don't know how big. But I've a hunch it'll be a whopper if you give me a free hand."

The chief froze. "Last time I gave you a free hand you went off to Marspole North and drank the city dry. Sorry. You'll get an assignment in due time."

"But this is *big*!" Powell expostulated.

"What do you want?" Gwynn asked.

"Send me off to trail the Eberle ship to Venus. Something'll crack before it lands, or after. I want to be on the spot with plenty of film."

"Can't spare you," Gwynn stated with finality. "I'm short of spot men and there's something breaking in New York. Something right up your alley."

The news instinct in Powell grew dominant.

"What is it?" he asked.

"I don't know. Disconnected stuff, but too much of it. Insanity. Monstrous births. Trouble with the fruit-fly genetic experiments at the U. Cyclops, teratisms. And crime! An outbreak of it. Matter of fact, Mike, we've been keeping it under cover by government orders. There's something decidedly queer happening in New York. Only Manhattan Island, for some reason. Occurrences that might happen occasionally, but not weekly. I got a tip today that a hunk of protoplasm in the labs had developed rudimentary gills and a spine. Know what that means?"

POWELL whistled. "But that *couldn't* happen!" he protested.

"It did. For three months New York has been under some screwy sort of influence. The government's got men working on the problem, and they asked me to hush it up for fear of a panic. But when snakes start sprouting feathers—yeah, that happened too. A king-snake at the Zoo. Pin-feathers, so help me!"

"Feathers developed from scales during the evolutionary climb," Mike pointed out.

"And I've got false teeth and whiskers. But I wasn't born with 'em. I want you on the spot, Mike, to track down all these weirdies."

"That's big, all right, Boss. But I'm on something bigger, I think. Just let me go off to Venus. I can be back pronto. Then I'll can New York for you. This is really big. I got a hunch."

"Just what is all this about?" the chief wanted to know. "What was on that print these mysterious enemies of yours destroyed?"

On the verge of telling Gwynn about Owen, Powell hesitated. The boss of Summit Newsreels was afraid of unfavorable publicity and libel suits. And Owen had a good reputation, the best.

"Can't tell you," Powel said finally. "But any newsreel company would pay me plenty to get this exclusive."

Gwynn was wavering. "How long will you be gone?"

Powell noted he said "will" instead of "would." Grinning, he shrugged.

"Not long, I think. When I get back, you won't regret it."

Gwynn was scribbling something on a scratch pad. He threw the slip at Powell.

"If you cross me," he declared, "I'll fire you like a shot, so help me. This time I mean it. I'll blacklist you all over the System."

Powell left the chief still making admonitory threats, and took the elevator down to the bar. Hector was busy with a collins. From the tangled wilderness of his face a long, curving tongue was flashing in and out, lapping up the liquor with frightful avidity. Powell collared his assistant and sent him off to charter a two-man space ship.

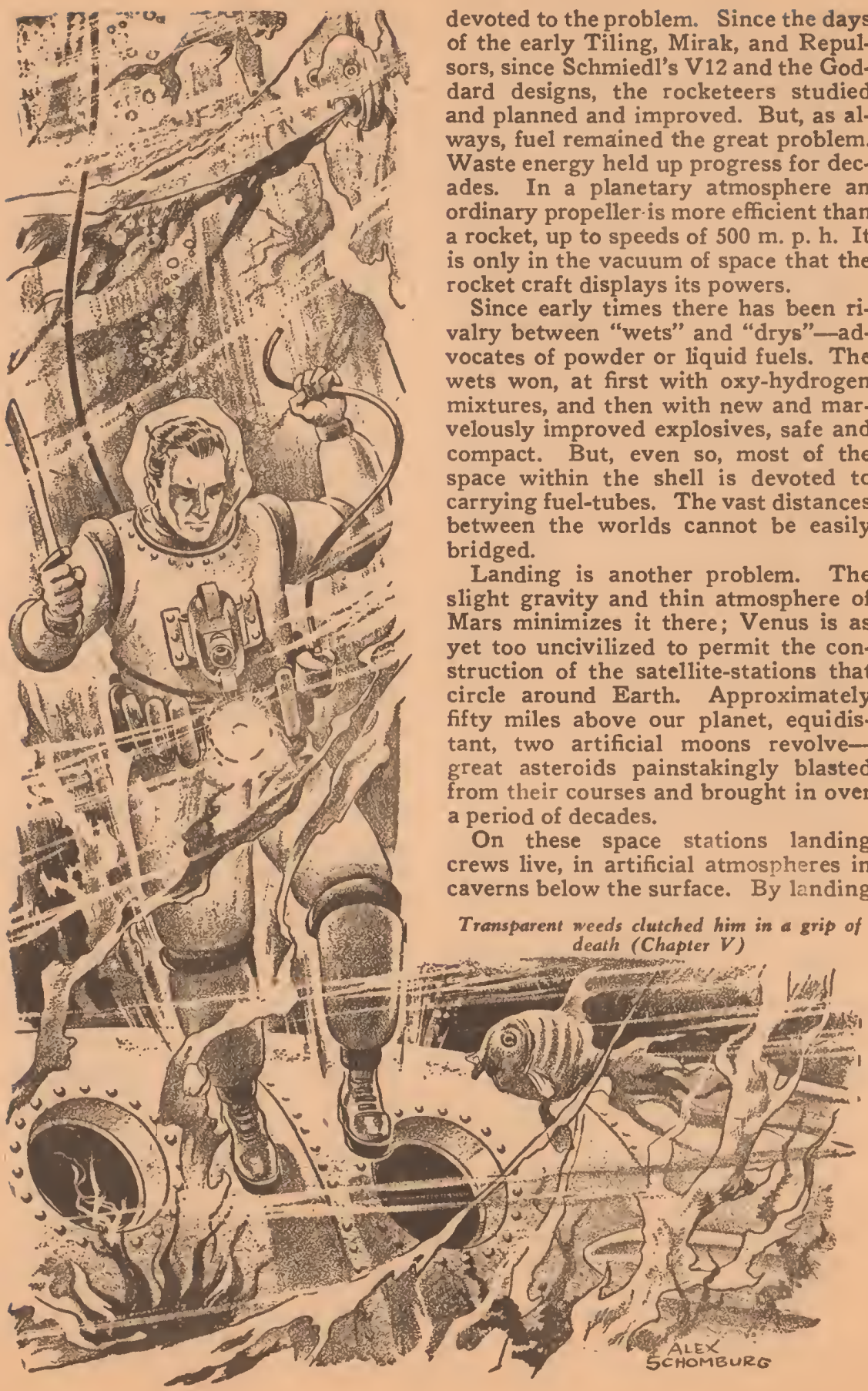
That done, he turned his attention to the bartender and went about the business of stocking the vessel's larder for the voyage.

"Venus is a wet planet," he explained, " but there's nothing but water. A few bottles of nectar won't go amiss."

"Nectar?" the bartender asked. "We don't stock it. Got some Minga-liqueur, though, just in from Mars."

"Whiskey will do," Powell said.

SPACE traveling, via rocket, isn't a cinch, despite the centuries of study and experiment engineers have



Transparent weeds clutched him in a grip of death (Chapter V)

devoted to the problem. Since the days of the early Tiling, Mirak, and Repulsors, since Schmiedl's V12 and the Goddard designs, the rocketeers studied and planned and improved. But, as always, fuel remained the great problem. Waste energy held up progress for decades. In a planetary atmosphere an ordinary propeller is more efficient than a rocket, up to speeds of 500 m. p. h. It is only in the vacuum of space that the rocket craft displays its powers.

Since early times there has been rivalry between "wets" and "drys"—advocates of powder or liquid fuels. The wets won, at first with oxy-hydrogen mixtures, and then with new and marvelously improved explosives, safe and compact. But, even so, most of the space within the shell is devoted to carrying fuel-tubes. The vast distances between the worlds cannot be easily bridged.

Landing is another problem. The slight gravity and thin atmosphere of Mars minimizes it there; Venus is as yet too uncivilized to permit the construction of the satellite-stations that circle around Earth. Approximately fifty miles above our planet, equidistant, two artificial moons revolve—great asteroids painstakingly blasted from their courses and brought in over a period of decades.

On these space stations landing crews live, in artificial atmospheres in caverns below the surface. By landing

on these satellites, rockets approaching Earth save days of circling and braking before entering Earth's atmosphere at a safe speed. Superstratocars take the passengers and cargo down.

Two other smaller satellites revolve more than eighty miles above the third planet. These, beyond the Heaviside Layer, are vast radio and television stations, relaying their messages to and from the inner moons by visual signals. Since no radio waves can penetrate the Heaviside Layer, this arrangement makes communication between planets possible. Rocket ships revolving in orbits around Venus and Mars perform the same service.

Cloudy Venus is still an outpost. Over sixty-seven million miles from the Sun, with a humid, enervating climate and the everlasting rainfall that drizzles from the great cloud-blanket, the planet has an evil reputation. Few Earthmen live there. It is being colonized slowly, chiefly at the temperate polar regions (which are hotter than Sumatra or Java), and, curiously, practically all the vegetation is in the huge, rolling seas that cover most of the planet.

EONS of rainfall have destroyed the watershed. Most of the soil has long since been washed down into the great waters, baring the undersurface of rock. A few odd plant-forms, feeding directly on minerals, exist on the small continents. The oceans are not navigable, save by flat-bottomed, sledlike craft that skim over the tangled Sargasso. Denizens of upper waters are serpentine and eel-like, and can slip easily in and out of the intricate growth, which, hidden eternally from the sun, is bleached and transparent.

The depths of the oceans, locked by the surface growth, is an unknown mystery, though there are legends of a submarine, semi-intelligent race dwelling on the bathysphere's floor.

White, shrouding mist hides most of the surface. The atmosphere, despite too much carbon dioxide, is breathable, but refrigerated suits are almost a necessity. Infra-red goggles are owned by each inhabitant. There is no truly intelligent life indigenous to Venus.

It is an outpost—a roaring, brawling hell, where even the polar cities are lawless bordertowns, where men live hardily and die easily. But for the exposed, valuable minerals, Venus would be uninhabitated.

The ship Powell followed was headed for Venus. During the voyage the cameraman several times attempted to communicate with his quarry, without success.

All space craft, entering the atmosphere of Venus, describe a narrowing spiral toward the planet. But Eberle's vessel did not attempt this. It drove down into the cloud-blanket and was lost. Despite driving the rocket ship to the utmost, Powell was still far behind. But his instruments marked the destination of his quarry fairly accurately, with the satellite radio ships and the poles as guide marks. Eberle had landed, apparently, near the shore of Mare Inferum, one of the oceans.

Entering the atmosphere, Powell threw out a great, braking parachute behind his ship. It lowered until he could pump out wing-drags. In spite of them it was hours before the vessel halted its headlong rush enough so Powell could use his propellers. He located a radio beam, got his position by it, and headed for Mare Inferum.

BUT more than a day had passed since Eberle's landing. Would there be any trace, any clue? Powell could not tell, could not even guess whether the ship he sought was still visible. The waters might have swallowed it.

"I'm taking a long chance," he told Hector. "By rights I should have located authorities and told them where to find the Eberle ship. But we've got competitors spotted on Venus. I'm not going to talk myself out of a scoop."

Hector giggled.

At last, however, more by luck than skill, Powell found his quarry, or at least a trace of it. Very close to shore his instruments detected the presence of a large bulk of metal. A spot of oil still floated on the surface, and as Powell watched a bubble rose and broke.

"It's down in the weed," the cameraman said glumly. "Wonder if Eberle got out?"

He used autogyro props and lowered the space craft toward the oil-marked, slowly rolling surface below. Through his infra-red goggles he could see the steaming waters fifty feet down, in a prescribed circle bounded by white fog. Though the seas looked transparent, Powell could not see any sign of the space ship's outline.

"What now?" Hector asked.

"I don't know how deep the ocean is here. Can't take soundings through the weed. But the ship will sink slowly in spite of its weight until it breaks through the vegetation. Then it'll plummet. I wonder—"

The Martian rubbed steam from a porthole. "What, Boss?"

"We've space suits aboard. I'm going down."

"In water? In weed?"

Powell nodded.

"Crazy," Hector said. "You die damn and quick, Boss."

CHAPTER V

Descent Into Green Hell

POWELL made his preparations. Instead of carrying a bulky regulation underwater camera, he took a compact magnafilm machine. It used a spool of magnetized tape to record pictures, instead of sensitized celluloid.

The cameraman slid his machine into a socket on the front of his space suit, made the necessary connections, and donned the glassite helmet.

Powell added a small box of chemicals to his equipment, attached a rubber tube to it, seized a sharp-bladed knife resembling a machete, and was ready. No air-hose was necessary; oxygen was automatically renewed within the suit. An almost unbreakable line secured Powell to a windlass within the ship, grounded on an out-jutting of rock over the water.

With a casual wave, Powell clambered out. The Martian slowly paid out the line, and the cameraman's feet, legs, thighs, and body slipped into the water. No sensation came through the insulated suit. Green darkness took Powell.

The waters seethed with gigantic, squirming protozoa, rotifers. Vertebrate, serpentine fish coiled swiftly through the weeds. Almost immediately Powell was entangled. He could not repress a sudden chill. Many an Earthman had died in the strangling Sargasso of Mare Inferum, captured and prisoned by the weeds.

Transparent vegetation, invisible, yet clinging and tenacious, clutched him. Powell had to use his knife. The weights on his shoes kept him upright, but he did not sink far. The weed was too thick.

He gripped the nozzle of his chemical hose and directed a spray of biting acid downward. Under the onslaught the weed became visible as it blackened and shriveled. Fish, coming within the circle of death, struggled and collapsed. As Powell's chemicals ate away the springy floor beneath him he sank down slowly, through a shaft of darkening sinuous sea-plants.

Down and down he went. How thick was the layer of vegetation? Powell could not guess. The waters darkened. He turned on a searchlight, spoke briefly to Hector via a tiny radio.

Below, the weed became less tangled. Here it had not yet closed in above the sinking ship. But Powell could get no glimpse of the craft.

Yes! There it was, an apparently motionless shadow beneath him. Suppose the vessel was shut, the doors locked? Powell might contrive to open one of them, but that would release a flood of water into the ship. Eberle would drown, if, indeed, he had not already succumbed. Then, remembering the patch of oil on the surface and the bubble that had driven up from the depths, Powell shook his head. The ship was not locked. It would not have sunk so quickly.

The squat projectile lay careened on its side, tilted at a grotesque angle. A mat of weed had formed under it. There was no light within. Powell sank down, meeting little obstruction now, till his feet grated on the metallic hull. He

saw a black, circular gap not far away. He made his way toward it.

INSIDE the space ship, it was midnight dark. But the searchlight's beam dispelled the gloom. Carefully, Powell let himself down into the interior. Then he gasped in surprise.

The control room, filling half the vessel, was a wreck. An explosion had obviously torn it apart. Scarcely a single object remained whole in the chamber. Metal was twisted and torn beyond recognition; even the quartzite ports were smashed and shattered. Fish busily devoured small red fragments floating in the prisoned waters. Powell felt sick. He managed to pry open a door and enter the ship's other compartment. It, too, was wrecked.

But this was curious. The door separating the two rooms had been shut. Had two identical explosions taken place?

Powell captured one of the floating fragments of raw flesh and put it in a container at his belt. Then he made a swift examination of the ship. At the end of his search he had come to a conclusion.

He had found no trace of motive power. Certainly Eberle used no rockets. That was obvious. But Powell decided definitely that the ship had been dismantled before the explosion. Someone had removed all clues as to the means of propulsion. Certain vital instruments had been crushed, others removed without trace.

Eberle might have been responsible, unless his shattered body drifted piecemeal within his own ship. But, in that case, why hadn't Eberle left the vessel while it was still in space? If he wished to avoid detection— That was it, of course. Telescopes of other craft might have been trained on the ship, and the thick fogs of Venus would hide any dirty work. But why? What was behind this enigma?

Powell thought he knew.

A sickening jar and a lurch threw him hard against a wall. He swayed up, keeping his footing with difficulty. A curious sense of motion appalled him.

The ship had broken through the bottom of the seaweed layer. Unhindered, it was plunging down through the bathysphere, into the unknown depths of Mare Inferum. And the cameraman's line, connecting him to his own vessel, had parted under the strain.

He had to get out of the ship, and in a hurry. He stumbled to the open port. He felt the suction of the ship drawing him down in its wake. He kicked off the weights on his shoes. Instantly he shot up—but not far.

There was a brief upward rush through green luminous dimness. Faraway, pale, shining lights swirled and moved eerily. Powell had a glimpse of titanic shapes that swam in the secret waters. Then they were gone, and the invisible weeds closed around him. Powell was caught at the bottom of the weed layer.

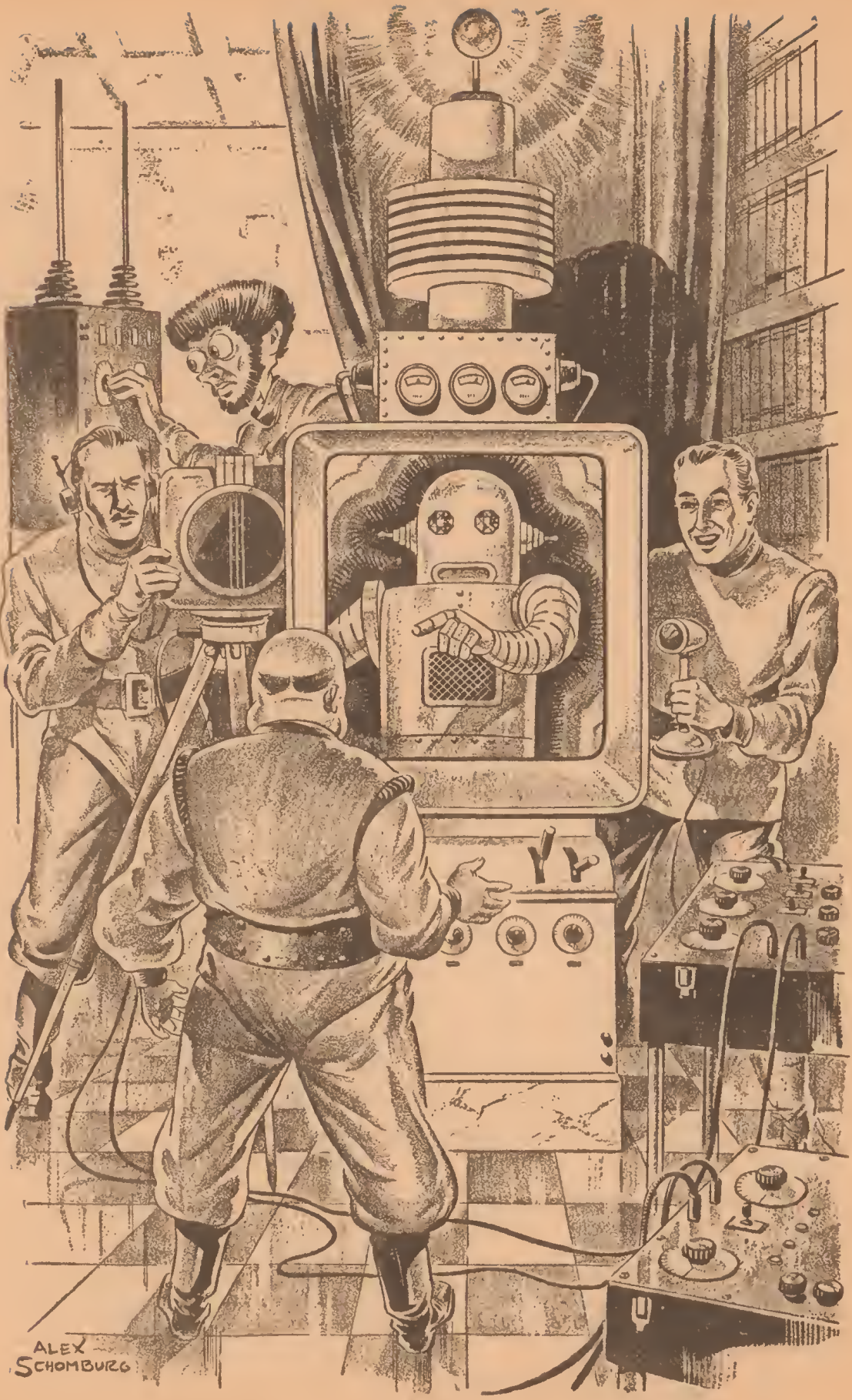
Despite his buoyancy, it was difficult to determine which way was up. No light filtered from the surface. Powell scanned the surrounding green vagueness with the aid of his flash, searching for the broken line. He could not see it.

FROM his belt the cameraman took a metallic tube. First he shut off the camera which had been grinding automatically ever since his descent began. The steel capsule, thin-walled, was airtight and buoyant. Powell tied a short, thin line to it and attached the other end to his helmet. He let the tube shoot up to the end of the line.

Thus guided toward the surface, he used his chemicals and machete to slash and burn his way up through the weed. The growth had already closed in the tunnel made by his descent. Going up was far harder than fighting down. He couldn't maintain an upright position. Twisting, straining, cursing, inch by inch he fought his way up behind the floating capsule.

It was nearly an hour before the cameraman found the dangling line. The jolt that disconnected it had also smashed the suit's radio beyond repair. Powell realized he could get no help from Hector.

With the aid of the dangling line, the task was somewhat easier. No currents existed in Mare Inferum to disturb his former path. Before the suit's oxygen



The robot's inhuman face grew on the screen (Chapter IX)

gave out Powell reached the surface, with a slight margin of safety. Hector sighted his helmet, grappled, and helped his companion into the ship.

"Long time no see," the Martian remarked, with commendable understatement. "Thought you die, yah."

"Yah," Powell said.

His thin face looked thinner. He seemed haggard, and his eyes were preternaturally bright. Oxygen under pressure had flushed his cheeks. He peeled off the suit, stowed the film can in a safe place. Outside again, he searched the rocky ground, sparsely covered with vegetation. A portion of this was crushed in roughly circular form.

The vines formed a springy mat underfoot, resilient and shiny, covered with scales that glittered frostily. The leaves were round and two feet or more in diameter, in order to secure as much filtered sunlight as possible. Powell scrutinized the ground carefully before he returned to his rocket ship.

"Eberle landed here," he told Hector. "He brought a portable autogyro on the trip. That's what he escaped in, after the space ship itself was sunk in Marè Inferum. The gyro went somewhere. What's the nearest town?" He examined a map. "Buena Torres. A hundred and twenty miles southwest. It's a hell-hole, a bordertown. But it's the closest by nine hundred miles. We go there, Hector."

The Martian swung the controls. The vessel rose and fled above the coastline. Powell, remembering the scrap of meat he had captured in Eberle's vessel, retrieved it and used a microscope. He made a careful analysis and count. Finally he sighed with satisfaction.

"Not human blood. I thought so. Some animal. Anyone investigating was supposed to think Eberle had been killed in an explosion that wrecked his ship. Well, we'll see what we can find in Buena Torres."

Hector was wringing accumulated moisture from the tousled mop that veiled his face. He laughed in an inane manner. Luckily, Hector had long since been conditioned to varying atmospheres. Otherwise, because of the change from Mar's thin air, he would have collapsed. Even so, wheezing gasps came from the blue-black tangle of hair.

BUENA TORRES was no civilized city. Tottering metal sheet leantos stood beside fibroid composition cabins. Seldom did Powell see a soundly constructed metal building. None was of wood. There was no wood on Venus, for one thing, and if there had been wooden houses, they would have warped and split in that hellish climate.

Reptiles abounded. Salamanders, chameleons, snakes, eels, worms, and frogs multiplied in the mud underfoot. These were encouraged for the havoc they wrought among the pestiferous insects.

Mercury vapor lamps set at intervals illuminated the tunnel-like street. There were no vacant lots. The town had grown painfully, shack by tumbledown shanty.

The street was crowded with men, and with women too, though prospectors never brought their wives to Venus. The polar cities were bad enough; Buena Torres was a back alley of Hades.

In place of a police force, the mining companies paid armed thugs to keep order of a sort. The one thing they feared was an uprising of miserably paid miners who might be incited to sack the mining stations and blast open the safes.

Behind the colonists came the vampires of civilization's outposts, those who pandered to men's vices. Gambling palaces flourished in Buena Torres.

Men lived at high tension here, and relaxed in the same way.

"Nice place," Powell said under his breath, feeling for his gun.

His nostrils twitched at the unpleasant stench.

Barking of dogs, yelps and shouts, oaths and tinpan music, strident songs and laughter and cries made the town nerve-joltingly clamorous.

"What now, Boss?" Hector said.

"Information. This bar first."

Powell steered his companion into a

roaring clip joint filled with an excited mob.

He pushed his way through to a corner table, and shook his head at a man who wanted to start a game of poker.

The waiter appeared, a rubicund, bulbous man with a billy in his apron belt.

Powell ordered two whiskies neat, at the same time managing to question the waiter casually.

"They come in and they go out," the waiter snarled. "I don't know nothing. They all look alike to me."

It was a bartender supplied the news.

"Sure," he said, gently mopping the length of the mahogany bar. "Been a rocket ship here for two weeks. Outside the town. Two guys had it. They dropped in a couple of times for drinks. Husky customers. But they took off hours ago. Ain't that right, Yank?" He turned to a blear-eyed, whiskered prospector near by. "You saw 'em go."

"Shore did," the other grunted. "Only there was five of 'em. Four big bruisers, and another that looked like he'd been through a meat-grinder."

"What d'you mean?" Powell asked.

"All bandaged up, he was, like a mummy. They had to carry him on the ship."

"Eberle!" the cameraman thought swiftly.

APPARENTLY the scientist had been captured—but by whom? If Dr. Max Owen were behind this plot, he had probably sent a rocket ship to Venus weeks in advance, and then ordered the abduction of Eberle on his own ship.

Why? Because Eberle's secret was worth money, plenty of it. Propulsion faster and safer than rockets practically wrote its own price.

Remembering the robot he had seen on Owen's televisor screen, Mike discarded that motive. There was somebody bigger than the electro-physicist behind this plot. A robot? Scarcely. But perhaps a robot controlled by someone who had made certain even his agents could not guess his identity.

"You know their destination?" Powell asked.

The prospector shook his grizzled head.

"Can't say I do. How's about standin' me a drink, buddy?"

Mike and Hector left. Powell was in a quandary. The destination of the outlaw ship was vitally important. But how could he find this out?

There was one way. Powell sent Hector to purchase fuel for his craft and made a televisor call to North Polar City.

From there his message was relayed to one of the satellite ships revolving around Venus.

The ship reported that a rocket cruiser had taken off from the vicinity of Buena Torres five hours before. With the report, it gave a definite direction tangent. When Mike checked it, he discovered something he had least expected.

Mars was in opposition. For the ship to have chosen that particular course meant one of two things. Either it was flying blind into space, for a point outside the System—or it headed for Earth.

"Earth?" Mike asked himself. "What the devil for? They could've snatched Eberle before he took off and saved themselves a lot of time and trouble."

It didn't add up.

Venus was falling behind. Mike still had the choice of aiming for Earth or the unknown, unguessable point billions of miles away.

"Nuts," he said impatiently. "Figure this out, Powell. The station reported rockets. That means a ship that can't cruise much farther than you can. Well? Isn't that any help?

"Of course it is, you dope. Whoever these guys are, they wanted a demonstration before they'd make a snatch. Sure; they're cautious. Get it now? Besides, on Earth they'd have cops to contend with. And that snatch job they did down there"—he shook his head sadly—"I'm the only damned fool in the System who'd tangle with that weed. Nobody else'd go to the bother to find out.

"It's Earth, Powell. Everything adds up now."

That was his own opinion. Even Mike Powell could be wrong.

CHAPTER VI

Blackout in Manhattan

THE satellite station looked like an asteroid, hurtling above Earth's air-blanket and revolving swiftly as it spun. It was sheathed completely in metal, sprayed on molten under pressure, and solidifying immediately in the chill of space. The tiny moon had taken years to ready, and even today, under the surface, work was still going on.

In spite of all the safety precautions, approaching a satellite station was dangerous work, even to a skilled pilot.

Sitting alertly at the control panel, Mike was conscious of his heartbeat and the pulse throbbing in his wrists. A fast approach would, of course, be fatal. He had to come in gingerly, on a long, looping arc.

Metal grated on metal. Powell felt a dragging clutch as giant magnets under the sheathing of the satellite took hold of the ship, gradually slowing it like an elastic band. He killed the rockets. Hector went tumbling end over end, bringing up against the compartment wall with a thud. He wasn't hurt, however, and rose giggling.

Powell slid out of his seat as shifting magnets scraped the ship toward an airlock. Glancing through a port, he saw the Earth rising swiftly above the curved, foreshortened horizon. It was huge; despite himself Powell winced. A world so unstable—as though it might come crashing down at any moment! Not for the first time Mike decided that space traveling was a funny thing, and hard on the nerves!

Then the black, star-sprinkled sky and the vast globe of Earth were blotted out. The ship slid down an inclined runway that opened beneath it. Metal plates shifted back into place above. The vessel halted with a jar. Cool white light came in shafts through the ports.

Powell opened the door and stepped out, followed by Hector, into a vast triangular room, in which the floor sloped up to the metal roof. Already air had been pumped in to replace that lost into space.

At the port authority office, Powell signed clearance papers and showed his Summit Newsreels identification card. That done, the cameraman was given two tickets and told that the next car to Earth would leave soon.

An elevator took Powell and Hector to a huge waiting room that looked like the saloon of an ocean line. Powell described a parabola that ended at the brass rail.

"Sotch," he said, "and a telephone."

The bartender supplied both orders swiftly. Gulping the Scotch, Powell asked for the New York office of Summit.

During the brief wait, Hector nudged his companion's arm and nodded significantly. Powell followed the Martian's gaze.

"Hello?" the telephone said. "This is Summit Newsreels. What can I—"

"Have my bath ready," Powell said crisply, and hung up. Then he turned to face Sue Clark and Lynn Plumb.

SUE was looking remarkably pretty, as usual. Her red hair curled attractively, and her green eyes might have looked like limpid forest pools to Powell if they hadn't also resembled inquisitive gimlets. She wore a neat business suit, carried a small camera, and was backed by Plumb, whose plump, round face was creased in an unpleasant grin.

"Hello, Brain," Sue said. "Have a nice trip?"

"Fancy meeting you here," Powell smiled. "Have a drink on me?"

"If you've got any money. Mingaliqueur frappé. That ship you were following didn't arrive, by the way."

Powell felt his heart thump down and bounce against his diaphragm.

"I don't get it," he said cautiously. "What ship are you babbling about?"

"The one you followed from Venus," Plumb interjected. "We broke your code message to Summit. We have our—uh—facilities."

"The ship cracked up in the Atlantic," Sue added. "Three men bailed out when it hit the atmosphere. A gyro was waiting for them. Up above Maine

somewhere. It went cloud-diving, and our men lost it."

Powell's thin face sagged. He was thinking hard. Unless Sue lied, he'd lost his quarry. The two thugs, with Eberle a captive, had escaped. What now? Go back to New York, apparently, and face Gwynn with the news of failure. Mike took a deep breath and ordered another drink. He felt far from well.

"A trip to Venus and back will look swell on your swindle sheet," Plumb remarked. "Even my expense account wouldn't stand that. Unless I brought back a scoop."

Powell thought of his Mare Inferum shots and felt somewhat better.

"What are you doing here?" he asked the girl.

"Trailing you," she said candidly. "You're after something big. And I'm going to get in on it. Just try and lose me, Brain."

Before Mike could answer, a gong announced the stratocar. He made for it, almost at a run.

In half an hour the car anchored on Long Island. The doors opened, and Powell, collecting Hector, stepped out, clutching his precious cans of film.

"We'll go up to the office," he told the Martian in an undertone. "Sue won't follow us there. We can escape through another entrance. Get a taxi."

"Mr. Powell?" a quiet voice asked.

"Yeah?"

Two quietly-dressed, efficient-looking men had taken their places beside the cameraman. One of them cupped a gleaming badge in his palm.

"We're from the IIB. We've orders to bring you to headquarters immediately."

"Oh-oh," Powell murmured. He glanced around. Hector had vanished into thin air. Sue and Lynn Plumb were near by, watching with signs of great interest.

There was nothing to do but consent. Mike did, annoyed at the loss of time and dignity. He hadn't broken any particular law.

HE was still clutching his cans of film when he was ushered into the IIB offices in a Fifth Avenue skyscraper. The two guards, having done their duty, departed. Powell stood silent and looked around.

He was in a small, plainly furnished room, notable chiefly for a glass desk that filled almost half the space. Behind it sat a slim, dapper, white-haired man whose face, though lined and old, was keenly alive. This, Powell knew, was Thorpe Stackpole, the head of the IIB.

Another man lounged in a comfortable leather chair. He wore baggy tweeds and smoked a pipe. He had a sunburnt, strong face, an unruly thatch

[*Turn page*]

of wiry brown hair, and glacial blue eyes that seemed almost electric in their piercing gaze. And this, Powell also knew, was Joseph Somerset, the IIB's most capable man.

He had filmed Somerset in the past. The man was an interplanetary figure, a gang-buster, courageous to the point of foolhardiness, a perfect machine for battling crime. He had cleaned up Marspole City in a whirlwind campaign that lasted scarcely three weeks; he had wiped out some of the worst thugs on Venus.

Only recently Somerset had returned with his biggest prize, the scalp of the biggest and smartest crook on three worlds, a man known only as the Spacehawk. For years the Spacehawk had gone uncaptured, pirating ships and heading innumerable rackets. Then Joseph Somerset had taken a trained crew and set off into space. A fortnight later he returned alone in the Spacehawk's battered ship, bandaged and nearly dead, but triumphant.

If Somerset and Stackpole were interested, it meant something big. Powell started to wonder if he hadn't made a mistake in getting into this game in the first place.

"Sit down," Stackpole said. The cameraman obeyed uncomfortably, and waited. For a few moments no one spoke. Then Stackpole nodded at Somerset, who took the pipe out of his mouth.

"We just want some information, Powell. We think you can help us. You sent a message to your company from Venus; we intercepted it and checked back on your activities. It looks like you're investing a gang that's interested the IIB for some time."

"A gang?" Powell said.

"It's something more than that. Lately there've been signs of a supercriminal organization stemming from New York. We thought the Spacehawk might be at the head of it. But he's dead, and this big racket still goes on. It's got plenty of ramifications, everything from big-time looting and government secrets to sabotage and plain murder.

"But it's an organized racket, a big one, and a scientific one. Eberle invented a new space drive. Apparently his ship could run rings around a rocket vessel. You know what that'd mean to a pirate, I think."

"Yeah," the cameraman said. "I'm beginning to understand a lot. Maybe I can help you. I'll tell you all I know, anyway."

"Just a minute," Stackpole suggested. He moved his foot slightly. "Want to record this. Dictaphone. Go ahead, please."

POWELL told his story from start to finish, holding back nothing. The others made few interruptions, save to clarify points obscure in their own minds. Finally there was a pause.

Stackpole broke it. "Dr. Max Owen, eh? The electro-physicist. Where is he now, Somerset?"

"New York," the agent said laconically. "Got here an hour ago."

"Yes. He has an office here. Well, I'd like to see those films of yours, Powell. Your Venus shots. I want to see Eberle's ship. How about it?"

"I'll have 'em developed right away."

"How soon?"

Powell calculated swiftly. "Half an hour."

"Good. Where?"

"At Summit. Ask for me."

Stackpole rose, ending the interview. "Good enough. And thanks for your help."

Somerset waved his pipe at the camerman and turned toward the desk. Powell let himself out, took the elevator down, and emerged on Fifth Avenue, his thoughts a turmoil. This *was* big. Bigger than he'd thought. He chuckled as he recalled how Gwynn had almost insisted on keeping him in New York to shoot monstrous births and lunatics. Freak stuff, good for a laugh or a shudder from the audience, but without the news value the IIB name would carry.

"Hello, Brain," said a familiar voice. "Did they let you go?"

Powell sighed. Sue again. And Lynn Plumb at her side. Afternoon sunlight gilded the girl's red hair. It also made her squint, but she still looked pretty.

"I'm going to the office," Powell ob-

served. "They won't let you in there. So you might as well scram. I'm busy."

"We'll stick around." Plumb grinned. "Let me get a taxi for you."

He turned toward the crowded street and gestured. A cab slid in toward the curb. It stopped—and then abruptly was swept forward while brakes screamed!

Powell caught his breath as he felt the solid rock of Manhattan's foundation shudder beneath his feet. There was a sudden outburst of sound—auto horns, shouts, screams, curses, rising in a mounting threnody throughout the city.

Sue was hurled into his arms. The two swayed perilously, trying to keep their balance. Plumb was smashed against the wall of the building.

"Earthquake!" Powell gasped. For a second he almost believed it. But then his gaze swept up beyond the rocking skyscrapers to the cloudless stretch of blue; he looked for a brief moment at the Sun—

And then the Sun vanished!

CHAPTER VII

The Lost City

OR, to put it another way, New York vanished. An army pilot flying his gyro across the island battled with his controls as a furious gale blasted in from the Atlantic. The hurricane tore at aircraft and swept them inland. It tore off wings and sent helicopters plummeting down to destruction.

The army pilot fought his stick while the world spun dizzily outside the windows. He had a flashing, chaotic vision of the soaring skyscrapers of Manhattan rushing up toward him; then the wind bore him eastward.

Above the shriek of the blast came a deep, grinding roar, like the clashing of titanic gears. The concussion nearly deafened him. Sick and giddy, he drove his ship into the teeth of the gale, pitching and swaying in the turmoil, and finally won his battle. The plane righted; the pilot breathed again.

He glanced out of the window and let out an incredulous shout. Cold with amazement, he looked from side to side in baffled disbelief.

Then he looked again at the place where Manhattan Island should have been. New York wasn't there any more. From the Hudson to the East River, from the Battery to Westchester, had disappeared.

A flat, featureless expanse of white—a gleaming smooth plateau—had taken the city's place. Its palisades towered fifty feet above sea level. It followed the contour of the coast where the wharves had been. Riverside Park was gone. Central Park was gone. The New York side of the Washington Bridge was a tangled mass of wreckage. Tumultuous maelstroms of bubbles marked the courses of the Hudson and East River tunnels. Blackwell's Island, Ward's Island, and Randall's Island were still there, but the Harlem River wasn't.

An irregular white plateau, some two by sixteen miles, stretched on the eastern seaboards where America's greatest city had been a few minutes before.

The army pilot got his breath again and dived toward the gleaming mystery. His was one of the first planes to land upon it. The wheels could get little purchase on the smooth, shining surface; there was almost no friction. But eventually the gyro skidded to a halt.

The pilot got out. Gingerly he stepped down, with a vague feeling of insecurity as his feet touched the solid surface. But the white sheet of—was it metal?—bore his weight without difficulty. The pilot stamped his feet, but there was no echo. He knelt and touched the surface of the plateau with his palm.

It was perfectly smooth and slightly cold. It felt exactly like porcelain. But, obviously, it wasn't.

Planes were arriving constantly. Men stood around in scattered groups, glancing up at the sky as though expecting to see New York drifting down from the void. Faced with an incredible enigma, they talked vaguely and without result.

A well-dressed, plump, bald-headed

man trotted toward the army pilot, attracted by the uniform.

"Eh? What's this?" he demanded angrily. "What the devil's happened?"

"*I* don't know," the pilot shrugged. "The Island—"

"But New York! I've got to get back to my office! I've an appointment!"

"Buddy," said the army pilot, with a touch of grim humor, "I got a hunch you aren't going to keep it. Not today, anyhow!"

"But—but where's New York? *Where's New York?*"

THE Sun had definitely vanished. Powell remained frozen, glaring up at a sky that had, in a split second, turned from deep blue to pale, misty white. Light still bathed the city. But it seemed to be diffused from all that depthless, strange expanse that couldn't be the sky and yet couldn't be anything else.

The roaring gale that blasted through the canyons between the skyscrapers tore at him, sent him, clinging to Sue, into the shelter of a doorway. The girl was making small, frightened noises. Plumb hurtled in beside them.

The three cowered there, watching a street that had gone mad. A grinding, clashing vibration deafened them, and a sense of frightful vertigo—a swift sidewise motion as though the whole island was sliding into the Atlantic.

Cars skidded across the street, mounted the curbs, smashed. People ran past, calling frantically. Powell momentarily longed for his camera. Then he forgot it as another violent quake sent him on hands and knees. Good Lord! Was the whole city cracking up, sliding into the ocean? There was no escape from such a catastrophe as this. When the solid earth slips beneath your feet, what refuge is left?

And yet the quake was not severe. Scarcely a building was damaged, due to the rhythmic movement of the vibration. Suddenly the grinding roar died. There was silence, save for the tumult of frightened men and women.

Powell stood up unsteadily and hauled Sue to her feet. Her hat was tilted over one eye, and still she was attractively pale and gasping.

"What's happened?" she gasped out.

"Why ask me? I didn't do it. Where's the Sun?"

"C-cloud," Plumb muttered, supporting himself against the wall. "It's behind the clouds."

Powell looked up. "Those aren't clouds. I've never seen a sky like that. It's cloudless, but it isn't blue. And there's no Sun. What—*Look!*"

His hand tightened convulsively on Sue's arm. Wincing, she stared up, as did Plumb.

The fathomless abyss above was changing. A shadow moved titanically against it. A shadow too vast for human comprehension! As though beyond the uttermost depths, a dim, misty outline wavered and moved and was gone. Gone without trace.

"Did you see that?" Powell whispered. "A-a shadow—"

"Some sort of cloud," Plumb said. "An eclipse. No. Couldn't have been."

"It looked like the shadow of a god," Sue said very softly.

Mike Powell fought down a cold, shrinking sensation inside his chest. He took a deep breath.

"Nuts," he observed. "Whatever it was, there's some logical explanation."

"What?" Sue asked.

"I'll let you know when I find out." Powell straightened his tie. "I'm going to the office. The boss'll need all the cameramen he can get to cover this. Adios!"

JAUNTILY he stepped out on the sidewalk. But he didn't feel that way inside. Powell had a queer, deep-rooted conviction that he had seen the basic laws of Nature itself go haywire. And he had a hunch, too, that trouble was just starting.

It was impossible to get a taxi, of course. Traffic was disrupted. Actually, nothing seemed changed except the sky. But panic had New York in its grip, and, to make it worse, many lines of communication had failed. Luckily, Manhattan had power stations and supplies of its own. Even at that moment repair crews were working frantically.

At the first corner Powell halted. The street before him was choked with

a flood of fugitives racing away from the Hudson coast. Their faces were pale and contorted, mouths open in frightened squares, eyes bulging with fright. Involuntarily, Powell glanced to the left. What he expected to see it was difficult to tell. He wouldn't have been too much surprised to view a dozen elephants charging along 42nd Street.

But there was nothing. Powell gripped a small, terrified boy, dragged him aside and questioned him.

"What's the matter? What are you running away from, kid?"

"Lemme go! The river's gone. Joisey's gone. Lemme go!" The boy tore free and vanished. Thoughtfully, Powell looked after him, and then in the opposite direction. The Hudson gone?

Mike plunged into the stream of fugitives and pushed his way west. Keeping to the side of the buildings, he presently found the mob thinning. But people poured out of the theatres, the hotels, office buildings, and added their

Two giant birds broke past the barrier (Chapter XII)

frightened number to the confusion.

At the docks there were only a few stragglers, however. These, more courageous than their fellows, were wandering about aimlessly, staring westward with varying expressions of wonder and incredulity.

Jersey wasn't there any more. Nothing was there.

Just—nothing!

A dozen feet away the ground ended. It sloped down in a perpendicular ramp, and Powell ventured as close as he dared. What he saw shocked him.

It was impossible.

To make sure, the cameraman lay down and wriggled forward on his stomach till his face hung over the brink. He looked down, shut his eyes, opened them again, and began to curse quietly to himself. This *was* enough to cause a panic.

Straight down, as far as he could see, there was only a bare rock wall, as smooth as though planed. There was nothing else. The fabled Edge of the World! The bottomless gulf that, Persians say, surrounds the Earth—

This gulf looked bottomless, all right. It seemed to be a continuation of the fathomless sky. New York apparently formed the summit of a crag that stretched down to infinity itself.

Carefully, Powell slid back and stood up. He turned to face the gaze of a dark, flashily-dressed man with a toothbrush moustache.

"What do you make of it?" the man asked.

Powell shook his head slowly. "I dunno. I can't get the angle."

"Neither can I. Looks like Jersey's gone west. Earthquake, I guess."

"Look!"

Across the sky a colossal, incredible shadow moved slowly. . . .

POWELL found Hector, the Redlander, waiting in the Summit offices. He collected the Martian and dragged him upstairs to Gwynn's office, firing questions as he went.

"The films? Got 'em? Are they developed? Where are they?"

Hector giggled.

"Okay, Boss. Put um in projection room. All developed. Locked in drawer. You want um drawer key?"

Powell took it. "Thanks. Lucky the elevators are still running. Good Lord, what a crowd!"

He stepped out in the hall. Gwynn's door was besieged with a mob of cameramen, reporters, and other employees. From the distance came the sound of Gwynn's voice issuing frantic orders. Powell pushed through the melee, dragging Hector.

"Mike!" Gwynn said, and then, to his secretary. "Take over for a while, Joe. I need a drink." The chief ushered Powell and Hector into an adjoining room and sank down sweating in a comfortable chair. "Fix me a highball. No soda. Just a splash. Have one yourself. Not that I need mention it."

Powell did things with glasses and pushed one into Gwynn's hand.

"Got any inside dope on what's happened?" he asked.

"Not much. New York's isolated. Martial law's been declared. I've got men covering everything. But, explaining what's happened—" Gwynn shrugged. "I don't know. All I've got on authority is a sub rosa report from the Tower astronomical observatory." He moved his head at Hector.

"Scram, ape," Mike said quietly. The Martian went off, bearing a bottle.

"Keep this under your hat," Gwynn resumed. "If it gets out, there's going to be one hell of a panic. Did you notice anything funny about the sky? Any—shadows?"

"I saw them," Powell said.

"Um. Well, the Tower used the telescope on them. They saw something. They don't know what. Certain objects, certain beings, not Earthly at all. And big, Mike, you can't imagine how big. Out where the stars should be, the telescope showed curves and angles. Solids, you know. And the shadows were—" He hesitated.

"What?" Mike urged softly.

"Living beings," Gwynn blurted, pathetically searching for belief. "Impossibly huge. Against them we're like ants. I don't know what the things look like. That's one thing they wouldn't tell me."

"Living beings," Mike repeated. "And we're like ants to them." His

eyes grew reflective. "Any trace of Richmond or Jersey?"

"None. New York has either been decreased in size"—he laughed miserably—"or we're in another world." He cackled without heart.

"Another world?" Powell stirred. "No, that's nonsense."

"Sure it's nonsense," Gwynn said irritably. "What's your idea?"

But Mike Powell was furiously stabbing the televisor button.

"You can't get through," Gwynn said. "The lines are jammed."

SOMEHOW, though, on the screen grew the face of Stackpole, the IIB man. Stackpole's face was taut and strained. He barked into the phone.

"Well, what is it?"

"Powell, Summit Newsreel," the cameraman declared swiftly. "I've got something for you. This—"

"It'll have to wait, Powell. I can't look at your film now. Hold it until we don't need martial law any longer."

"Wait a minute! This is—"

The connection broke abruptly. Cursing, Mike tried to get through again. His luck didn't work twice.

"What are you trying to do?" Gwynn demanded. "Where do the cops come in?"

Instead of replying, Mike called in Hector.

"Now, here's a feeble brain," he said to Gwynn. The Martian giggled appreciatively. "Let's try out my reasoning on him."

To himself, Powell admitted it wasn't much of an idea, but it seemed plausible. The more he thought of it, the more convincing it sounded.

"Look, Hector. You're a criminal. The cops are ready to raid your joint. What do you do?"

"Move," the Martian answered sensibly.

"There you are, Boss. I know why. I think I know who. And I'm beginning to figure out where. I'll let you know when."

"When what?" Gwynn bleated, confused. "What's going on here?"

"When I get it all straight."

Mike grabbed Hector's arm and pulled him to the door. In the cameraman's mind was a tangle of intuition, backed by very few clues. If he could manage to pull something definite from that mess, he would know who had done what to New York and for what reason. The reason was all he had.

CHAPTER VIII

The Robot Returns

NEW YORK was cut off from the rest of the world. That was Mike's first premise.

How had that been done? Certainly by no known scientific methods. It was incredible, but it had happened. Mike couldn't deny that, so he accepted it as something tangible to base his hazy deduction on.

One way to isolate New York was to erect a barrier around it. There were no signs of such a wall. It would have to be a pretty damned enormous one, anyhow, and Mike refused to believe its possibility. Another objection to it was its instantaneity. And what relation would a wall have to the grinding, lurching sense of movement that had accompanied the metamorphosis?

Movement?

Had the metropolis been moved? Had it been wrenched free entirely from the Earth and sent hurtling out into the void? Mike shook his head. Not much chance of that. The atmosphere would have shot off into space. The Sun would not have disappeared. More important, gravity would have been missing almost completely.

New York itself was unchanged. That was another factor. Wrenching a city to another world must certainly destroy it, and New York was far from being destroyed.

What then? Mike had only two things to go by. No wall had been built around the city, and Manhattan Island had not been moved through space. Yet it *had* been moved. How, and where?

How? By some strange and unknown science. Where? Into an alien en-

vironment that Powell thought could not exist in this System. There was no place for it. Since New York could not have moved spatially outside the System, it followed that it had moved, but not in space.

That left only one possible answer, and Mike was not too anxious to think about it.

Another dimension? His mouth formed the word "Nuts," but, incredible as the idea was, it wasn't entirely impossible. For centuries, scientists had speculated on the existence of other planes and worlds lying co-existent with our own, but vibrating at a different rate. Its atoms might intermingle with ours, invisible and impalpable, but real.

"The fourth dimension?" he asked himself. "Hell, *that* scientific fairy tale?"

But New York had been moved. The X of the equation, the unknown quantity, pointed to something improbable, but not impossible. Manhattan could not have been moved, without damage, through space. It could, conceivably, be moved into another dimension.

Only, what kind of science, and whose, could accomplish it?

Mike had one suspect, and nothing to base his suspicion upon. The controlled robot he had seen on Dr. Owen's televisor was an example of super-science. The IIB was closing in on him with the murder of Eberle and the theft of his space drive propulsion. When the law closes in on an ordinary criminal, he tries to escape. When the law closes in on a super-criminal, he seeks a hideout, one to which he alone possesses the key.

It fitted, even though it was fantastic. *If* the controlled robot had the science to send Manhattan into another dimension; *if* he desperately needed a hideout, then X was no longer an unknown quantity.

It was merely a guess, Powell knew. And he didn't even have the faintest idea who was behind the robot. But at the moment he could think of no more plausible theory. The robot was the key to the problem. Powell was certain of that. Just find the key, that's all.

FINDING the key was not so impossible to a man with the resources of Summit behind him. The first thing Powell did was to secure the services of an ex-burglar to whom locks were merely gestures. This Houdini often came in handy when difficult newsreel shots had to be obtained in the face of adamant objections. He was located without too much trouble. Meanwhile Powell discovered the address of Owen's New York apartment uptown.

He enlisted the aid of several of Summit's technical crew.

"I want all the newsreel stuff we've got on Dr. Max Owen," Powell requested. "He's made a lot of public speeches. Dig up the prints. And get a make-up man to fix me a ringer for Owen. I want a perfect duplicate. One of our March of Events actors should fill the bill."

Powell went to a projection room with Summit's best cutter, and there examined the celluloid record of Owen's public career. There was quite a lot of footage, all of it carrying soundtrack.

"It's all here," the cutter said. "What now?"

"I want to fake a speech. Let's see." Powell reached for a pad and pencil. "This won't be easy. I can't say too much or too little. Um." He wrote slowly. "There. That ought to do it."

The cutter read the message. "It don't make sense."

"I'm not premiering it at Radio City. It's a private showing. Use those shears."

The other man nodded and threaded a strip of celluloid on a spool. He flicked over a button, turned on the amplifier, and made swift notes as the voice of Dr. Owen boomed through the projection room. The sound track only was registering.

"We are here today to celebrate the triumph of one of our most esteemed colleagues, who has just been awarded the Nobel Prize . . ."

On and on the voice went. The cutter listened intently, checking off words occasionally in Powell's message.

"Watch the tone," Mike said. "I

want to register excitement in the playback."

"Okay."

Presently the initial step was finished. The cutter collected his notes and began running celluloid strips through his hands with practiced skill, halting sometimes to snip off a bit with his scissors. The task took a long time. But finally the cutter held up a strip of film, deftly cemented together and ready for running on the projection machine.

It was a forged record of Owen's voice, in his own tone and words! The desired words had simply been cut out and rearranged in the order of Powell's scribbled message, and the forgery was foolproof and indetectable. It was a perfect fake.

"Okay," Powell said. "Is the ringer ready yet?"

A man entered. His resemblance to Dr. Owen was fantastically perfect. The make-up crew had done a good job. To the eye, it was as though Owen himself stood before Powell—fat, bald, red-lipped, and with sweat-shining face.

"Swell," the cameraman said. "What's your name, fella?"

"Brody."

"Well, here's your job, Brody. I'm faking a telecast. Here's the soundtrack. I want you to register, but I'm dubbing in the voice. Practice till you can fake it perfectly."

POWELL left to find Hector and the ex-burglar. He gave the Martian instructions to follow with the necessary equipment.

"You phoned Owen?"

Hector's bushy head nodded. "He out."

Powell grinned and took Martin, the ex-burglar, into the street. Already traffic was unsnarled. Officers and national guardsmen patrolled the avenues. Despite the air of tension that hung over the city, there was little trace of panic.

They rode uptown to within a block of Owen's address. There he located a televisor booth in a drugstore and called the electro-physicist's apartment. He could get no response.

"He was out an hour ago when I cased the place," Martin said. "Didn't look like he'd been in lately."

"You're sure you found a concealed televisor?" Powell asked.

"Sure. Just like you said I would. I didn't monkey with it, though."

The two men walked swiftly along the avenue till they came to the huge apartment house in which Owen maintained his New York quarters. The elevator took them up to the eleventh floor. They walked down a flight to the tenth, paused before Owen's door, and listened.

"Nobody home," Martin said. At a gesture from his companion he drew a tiny sliver of steel from his pocket and went to work. From another pocket came an electromagnet, which he employed with deftness and skill. In half a minute the door stood open.

The apartment comprised six rooms, none of them tenanted. Martin drew Powell into the library, showed him a concealed spring in a bookcase, and swung down a panel that revealed a compact televisor set. [*Turn page*]

"Sure," Powell said with satisfaction. "He'd have some way of getting in touch with his boss. The boys ought to be registered by now. Go down to the lobby and meet Hector, will you?"

The ex-burglar vanished. Left alone, Powell let his fingers caress the barrel of a short, ugly heat-gun in his pocket. He grinned unpleasantly.

"If the doc comes back," the cameraman ruminated, "he's going to get a surprise. *And* a hot reception!"

THE plan started well. Hector and his companions arrived with their equipment neatly packed in traveling bags, and managed to secure an apartment on the ninth floor. That done, and the bellboy tipped and dismissed, the Martian went down to the lobby to wait for Martin, who was not long in appearing.

Hector gave the ex-burglar his room number and remained on guard against the eventuality of the real Dr. Owen's appearance. Five minutes later Martin and two of Summit's technical experts entered Owen's apartment bearing a half dozen heavy suitcases.

The room became a scene of frenzied activity. The amplifier was set up and checked. The electric sockets were plugged in. Brody's make-up was examined painstakingly. At last all was ready. Powell drew the blinds and switched on a lamp, watching that no betraying shadows might come within the vision of the creature he was trying to locate. Brody took his place before the screen.

"We'll try it out," Powell said. "Run through it, Brody." He flicked over the amplifier button.

The dress rehearsal was a complete success. On it a great deal would depend—perhaps even the ultimate fate of New York.

He pressed the televisor switch. Instantly red light flared on the screen. On and off it flickered, regularly, mechanically.

Was this a signal? Was some countersign necessary? Or could it be merely a busy signal? There was no way of telling. He turned off the televisor, and turned to look blankly at the others.

"Something wrong?" Martin asked.

"I dunno. Maybe."

Martin came forward and scrutinized the televisor.

"I've seen these private-beam sets before. When I was practising. There's a regular signal they use, different with each set. Let me have a look at this."

Feeling slightly sick, Powell stepped aside and let Martin finger the televisor. A regular signal—that was bad. He should have expected it. It was a logical precaution to take. But without knowing the signal there was no way of carrying out the plan.

Powell's nerves got more and more tense as he moved uneasily about the room, trying to think. His gaze roved over the bookshelves, as though searching for a clue. It'd be a hell of a thing to give up now!

As it turned out, that wasn't necessary. Martin straightened up with an exclamation of satisfaction. Immediately the cameraman was at his side.

"What's up?"

"Got the signal. I know these gadgets backwards. Used to repair 'em, in fact. When I was—"

"Practising," Powell finished harshly. "I know. Well?"

"Turn it on. Get ten red flashes. Switch it off and then on for five flashes. Then on again for ten, off, and on. I'll show you."

On the screen a picture grew!

Powell leaped back, dragging Martin with him. He gestured at Brody, who slid into his place before the televisor. But the haste was unnecessary.

There was no figure on the screen. Just a blank wall in the distance, a wall across which wires lay like a network amid dozens of dials and gauges and switches. Powell whipped a camera from his pocket and slipped a magnifying lens upon it. Hastily he began to film the scene.

Then something came into view—a man of metal, man-sized but utterly unhuman, the same creature Powell had seen in Owen's Chicago home.

There was a cylindical body, topped by a globular head with faceted eyes. The arms seemed made of some pliable stuff, and were anthropoid in contour. The legs were not. They were simply jointed bars of metal, scarcely two

Silently, the robot gazed at his helpless captives (Chapter XIII)

inches in diameter, and there were three of them, placed equi-distant around the base of the cylindrical torso. They ended in semi-flexible claws that bent springily as weight was placed upon them.

The robot came to the televisor. Its inhuman face grew huge on the screen. It nodded slowly.

Mike gulped. Cold bloodlust was the only emotion that face expressed.

CHAPTER IX

Fight for a Body

POWELL waved his hand. Behind him machinery began to work smoothly and silently. Brody leaned toward the televisor; his lips moved as the faked, amplified voice of Dr. Owen rang out.

"I've been trying to reach you for hours! Couldn't get to the apartment. Something's gone wrong. I haven't time to tell you now. I'll call you again as soon as I can. It's important, and *dangerous!*"

The robot did not move. But its reaction was as Powell had expected.

"What is wrong?" it asked. "Tell me quickly!"

"I can't. There's no time," the amplifier cried. "I've got to find

Eberle right away. I need help badly!"

How would the robot react to that? Did the real Owen know where Eberle was? Apparently not. Powell grinned as the cold voice spoke.

"Eberle is at the Sun Sanatorium. Get in touch with him there. How are the—"

Powell dared wait for no more. A question would be fatal. Swiftly, he shut off the machine. He found to his surprise that he was perspiring profusely.

"Okay," he told the others. "Clear out as fast as you can. *Vaya con Dios!*"

Mike fled with Brody, collecting Hector in the lobby and dragging him along. He had to find a taxi in a hurry and get to the Sun Sanatorium, where Eberle was, presumably a prisoner. If the real Owen happened to call his boss, there'd be hell, and lots of it.

"What now?" Brody asked as they piled into a cab.

"Trouble," Powell said grimly. "You don't have to come along, you know. It's dangerous business. I can let you off now if you want."

"I'll string along," the other said. "Count me in."

"Swell! Here's what I want you to do, then. . . ."

While Powell outlined his plan, his mind was busy with other things. The streets were not crowded. New Yorkers had sought their homes as though by instinct, the primeval instinct of seeking shelter.

Radios and televisors boomed reassuring messages. The situation was well in hand, the speakers declared, and through repetition they managed to instill some degree of confidence in the public. The water supply was adequate. Food was plentiful, compressed, dehydrated, or canned.

In the vaults beneath the city there was a stock of emergency supplies, laid by for such emergencies as war, famine, or pestilence. There were great water tanks, and, if necessary, water could be condensed from the air itself, though in no great quantity. Powell knew that the water supply was the fatal danger. It wouldn't last forever. Nor would the fuel that ran the complicated mechanism of New York. What then?

SLOW, horrible death would turn the city mad with panic—men and women becoming raging beasts as they fought for a vanishing chance of life. It wasn't a pleasant thought. Powell felt slightly sick. The pit of his stomach was like a hard, cold lump. He grinned wryly. Eberle might be able to help.

What if the robot could have told the location of its own hideout!

But that was too risky. Dr. Owen might already have known where to find the robot. Such a question would have instantly revealed the fake. And if Owen didn't know, there was a good reason for it. The robot might keep its hideout secret even from its own subordinates.

And the robot itself—what about that? Was it alive? Certainly no mechanical brain had ever been constructed small enough to fit in such a small compass as the automaton's head.

But need it be a mechanical brain? Recently there had been startling developments in trepanning and brain surgery, led by a Chinese medico who had, Powell remembered, vanished without trace not long ago.. Might be something in that. But the difficulties of transferring a living brain into the metal skull of a robot were insurmountable, or nearly so. Powell found a cigar and lit it thoughtfully. What other solution was there?

Remote control? A wireless-controlled robot, working on a tight beam? Possibly. It was easier to believe that than to believe in a living, intelligent automaton. It meant, of course, that a human being was at the bottom of the mystery. A man shrewd, cunning, with a scientific bent and a criminal mind. The Spacehawk would be the logical choice, if he were still alive. But the IIB had got the Spacehawk. Powell almost regretted it. With him alive, there'd have been no guess work. Who else was left?

Powell didn't know. The cab came to a halt.

"We here," Hector said. "What now?"

The cameraman nodded at Brody.

"Your move. Luck, fella. You'll need it!"

THE Sun Sanatorium was atop a skyscraper in the uptown area north of Harlem. There was a landing field for gyros, but martial law had ordered all planes grounded till further notice. Powell and Hector followed Brody into the lobby, after instructing the cab-driver to wait. They rode up in an express elevator.

They emerged in an open-air patio above New York. It was floored with red tile, and a sun-dial stood forlornly in the center, looking singularly useless, in the absence of a Sun. Opaque glass walls hemmed in the enclosure. A girl seated at a switchboard near by looked up and smiled pleasantly.

"Good evening. Can I help you?"

Evening? It was still light. Powell glanced at his watch and gasped. Eight-thirty p. m.! The strange, shadowless sky had not changed. Either there was no night in this bizarre world or else the days were unusually long.

Powell had decided that it would be dangerous and useless to ask for Eberle, since the scientist would scarcely be registered under his own name. Brody stepped forward.

"I'm Dr. Owen. Have you a message for me?"

The girl registered another dazzling smile. "Oh, yes, sir. You are to go to room twelve-fourteen."

At room twelve-fourteen Powell rang the buzzer. The door opened. A well-dressed, stocky man with an arrogant chin and a who-the-hell-are-*you* air stood on the threshold.

"I'm Dr. Owen," Brody said.

"I know. These two—"

"They're all right. Where's Eberle?"

The stocky man hesitated and then stood aside, letting the newcomers enter. He carefully closed and locked the door.

"I'm Haverhill," he said, extending a large, capable-looking hand. Brody shook it, while Powell repressed an insane impulse toward laughter. The amenities must be preserved, even among unscrupulous crooks.

Haverhill led the way toward an adjoining room.

"I was going to keep him upstairs in the sanitorium," he said over his shoulder, "but it was too dangerous. He might talk. He won't now, of course."

The man nodded meaningly toward a long table that stood against the wall of the bedroom they had entered. It was littered with apparatus — test-tubes, hypos, retorts, a Bunsen burner, and a curious-looking device of mirrors set at intervals about a metal ring, which in turn was attached to a series of cogs and gears. A figure lay fully clothed upon the bed. Mike suppressed his thrill of triumph. It was Eberle!

HE was a big, beefy muscular man who looked like a wrestler. Blue, unshaven jowls and an untidy mop of iron-gray hair bounded the ruddy face. Now the great torso and the heavy limbs lay utterly inert, the chest rising and falling very slowly, the eyes half closed.

"Anything new?" Brody asked.

"I've got the information on the space ship," Haverhill replied. "The scopolamin did the trick. I've sent off a messenger with the notes. Eberle's space drive principle is logical, apparently, and easy to construct. The First will be able to duplicate his ship easily. He televised me you were coming, by the way. You're to get in touch with him immediately."

The First? Was that the name by which the robot was known? Powell frowned. He wanted to get Eberle out and to a safe place before trouble developed. But he also wanted to get all the information possible from Haverhill. The latter blew through his lips impatiently.

"I've a televisor here that's connected with the First. Do you want to use it?"

Brody took a chance. "Yes. But I want to talk to Eberle first."

"Talk to him?" Haverhill looked puzzled. "But you know—" He stopped short. His brows came together in a frown. "Talk to him! You'd better talk to the First, Owen. Or else I will!"

He reached casually into his pocket. Powell saw the glint of a gun coming out. With silent fury, the cameraman dived at Haverhill's knees. The two crashed down in a vicious tangle.

Hector picked up a vase, considered

it thoughtfully, and discarded it for a larger one. Watching his chance, he stepped forward and stood above the struggling men. Abruptly, he smashed it down on Haverhill's skull. Haverhill collapsed all at once.

Powell got up, ruefully fingering his throat. He recovered the gun and put it in his pocket.

"Not so good," he said to Brody. "You made him suspicious. Apparently Eberle can't talk, and the real Owen knows it. Well, can't be helped now."

He went to the bedside and examined Eberle. The man's breathing was shallow, his face pale. With a deft finger Powell lifted an eyelid and scrutinized a dilated pupil.

"Drugs. Yeah. And that mirror gadget—it's a hypnotic machine. Apparently Haverhill got the space drive dope from Eberle and then blotted out his memory. Sounds logical. Eberle's too valuable to kill, at least till the First tests the space drive formula. But our friends figured something might go wrong so Eberle would fall in the hands of the police or the IIB. Hypnosis and drugs would keep Eberle's mouth shut for a while, anyway."

POWELL moved to the table, examining phials and bottles, and placing some in his pockets for analysis. Haverhill groaned and opened his eyes. Hector caught the gun Powell flipped him and covered the man.

"You're coming with us," Powell said. "We'll try a little scopolamin on you, fella. You ought to know plenty and truth serum'll get it out of you."

Haverhill grinned crookedly. His hand went to his mouth.

Hector moved too late to intercept the action. The prisoner shuddered convulsively. His body arched like a bow, and then relaxed.

Haverhill lay quiet, unmoving. Dead!

The camerman jumped forward, knelt beside the body. Hastily he felt for the heartbeat. There was none.

"Scram up to the sanitorium! Get somebody down here with adrenalin. Quick!"

Brody rushed out. The cameraman gestured toward the figure on the bed.

"Take him out, Hector. To the Summit hospital. I don't want him here when the medicos come in."

The Martian scooped up Eberle in strong arms and fled. Powell turned back to the body on the floor. On one lax finger was a ring, with jagged, tiny splinters where the setting had been.

"Poison. Sure, he'd have that. The First takes no chances. Well, maybe adrenalin will do the trick."

Two doctors and a nurse hurried in, followed by Brody. They wasted no time. One of them prepared a hypo, while the other, at Powell's suggestion, examined the ring.

"Looks like curare," he said. "Can't tell without an analysis, though."

He helped his companion inject adrenalin into Haverhill's heart, and then clamped a stethoscope into his ears.

"Not much chance. A few seconds, a minute, perhaps, if we're in time. But we can't keep him alive longer than that."

"Hold it," the other snapped. "The heartbeat's starting. Get the orderlies, nurse. We've got to get him upstairs into the iron lung."

But as the girl started out the physician made a discouraged gesture.

"No use. He's gone."

"More adrenalin?" Powell suggested hopefully.

"He's dead. Now I think you'd better explain what happened."

"He committed suicide."

"It's quite all right," Brody said, coming forward. "I was here at the time. This man was in no way responsible."

The doctor lifted his eybrows. "Of course, Dr. Owen. However, you'll understand that this is a matter for the police."

"Sure," Powell said hastily. "You know where to reach Dr. Owen."

"The Martian who accompanied you—where is he? I think you had better remain here till the police arrive. A matter of simple precaution, you understand."

Powell went toward the door. "Sorry, we can't wait. This is government business."

"Government business? Your cre-

dentials?" The doctor stepped in Powell's path. The cameraman sighed and took out his gun.

"My credentials," he observed, pointing it accurately at the physician's heart. "Step aside, please."

There was no difficulty. A loaded heat-gun is a good passport anywhere. Powell and Brody backed into the hall, raced to the elevator, emerged a few seconds later in the lobby. They hurried toward the entrance, ignoring the shrill ringing of the desk clerk's phone.

"Got to reach Eberle fast," Powell explained. "Get a cab."

For Eberle was in desperate danger. The First would have no hesitation in killing the man to close his mouth forever. An interview with the police would cause delay that might be fatal to Powell's plans.

CHAPTER X

The Accelerated Genius

POWELL left Brody at the Summit Building, dashed inside to the elevator.

"Keep on call," he shouted back at Brody. "I may need you again."

At the hospital floor, he found Eberle in a private room, with Hector and a physician waiting for him.

The Martian greeted Powell effusively.

"Okay, Boss. I fix um. You come out all right?"

"Sure. Hello, Moulton. What's the verdict?"

"Semi-cataleptic state. Drugs, I think. What's up?"

Powell explained, but not too much. From his pockets he drew the bottles he had taken from Haverhill's apartment.

"Hypnosis, too," he added. "Can you do anything?"

Moulton examined the bottles and sent some away for analysis.

"Possibly," he said doubtfully. "I'll try."

He tried, vainly and earnestly, for minutes that grew into hours. A message came through from Gwynn. The chief wanted to get in touch with Powell. It was vitally important, he said. Something had to be filmed.

"Nuts," the cameraman told Hector. "I can't leave Eberle now. Go see Gwynn for me. Oil him along."

But the chief was silent. At last Powell went to a televisor.

"Yeah?"

"Damn you, Mike, what do you think I'm paying you for? Get on the job! Get your camera and go down to the Battery. Hell's broken loose there. They've sent down the militia already."

"What for?"

"Remember what I told you about those monstrous births in the last few months? The snake that sprouted feathers? And the other stuff? Well, there's a hundred or more creatures down at the Battery that are tearing up the town."

"What sort of creatures?" Powell asked in a humoring tone.

"I don't know. Far as I can tell, they look like ostriches. They're poisonous. Get on the job and take your camera."

"Listen, did you ever stop to think of your markets?" Powell said. "Where are you going to release your newsreels now? We're not on Earth any more."

"Not now," Gwynn snapped. "But if we do get back, what a scoop we'll have! Think I'll pass up a chance like this? Get to work!"

"Okay," the cameraman grunted, and switched off. Giant poisonous birds, eh?

What a hell of a time for a sensational break!

"He's waking up, Powell!" Moulton called.

Exultation leaped in Mike as he raced back to the hospital room. Could Eberle solve this tangled mystery? Could he throw any light on what had happened to New York?

Powell didn't know. But he prayed, silently and fervently, as he stood above the bed and watched Eberle's eyes open and the light of intelligence grow in them.

"Don't say anything yet," Moulton cautioned. "Give him time. I used the insulin shock treatment, and he's still weak."

EBERLE didn't appear weak. His beefy face was set in lines of strength and character; his cool blue gaze alertly took in his surroundings. Silently, he watched Moulton leave the room. Then he spoke, in a deep, rumbling voice.

"Well? I'd like an explanation."

"You'll have it," Powell said. "But first, what's the very last thing you remember?"

The blue stare was probing. "The Mojave space port. I was attacked, rendered unconscious. When did that occur?"

"Weeks ago. Do you feel strong enough to listen?"

"Yes. Go ahead."

Swiftly, thoroughly, Powell outlined what had occurred, keeping nothing back.

Hector perched on a chair and listened.

"Now you know as much as I do," Powell finished. "Probably more. If you can throw any light on what's happened—"

Eberle tousled his iron-gray mop of hair, rubbed his large chin with stubby fingers.

"I need a shave," he said at random. "Yes. You have given me much important information. All these loose threads, they have a focal point. I can see that now. Without a motivation, these various happenings would be coincidences, and there are too many of them to be natural. Some force has been at work in New York for months presumably."

"This robot—"

"A result rather than a cause. I do not believe you're right in assuming that this First, as you call him, was responsible for hurling Manhattan into another continuum. Naturally, he might tell his subordinates that he had done so, in order to keep their confidence and prevent his organization from breaking up.

"But such a sudden development of a master criminal mind is unnatural. It was caused by this unknown force, just as these monstrous births and mutants were so caused. Even I," Eberle grinned sourly, "found myself able to solve problems that baffled me for years. I invented my space drive and other things.

"My brain seemed to have grown suddenly in scope and intelligence, and I was no genius. My scientific potentialities were developed by this strange force, I think, since my development was so sudden. Obviously this force did not originate in our own world."

He went off at a tangent. "Shadows in the sky, you say. Giants of inconceivable size. New York in another universe. That is not impossible."

"No," Powell grunted. "Not exactly!"

"There are four dimensions," Eberle said thoughtfully. "The fourth is something of a mystery. Even Einstein admitted that. It could be time, or a different direction of space. Well, each dimension is an axis. The time-axis is the one in which we're interested. Give me a sheet of paper and a pencil. Thanks."

Eberle rammed the pencil through the center of the paper.

"This will serve. Call this the time-axis. Call this plane, the upper surface of the paper, our own world. Actually, of course, it is not a flat plane, but a three-dimensional continuum. And the time-axis is not tangible, like this pencil.

"This paper has two sides, each perpendicular to the pencil. Our three-dimensional world has two—well, sides, each perpendicular to the time-axis."

EBERLE tore a small bit out of the paper and made a cross on one side of the scrap.

"This mark is up now, eh?" He fitted it into the irregular hole. "Now I revolve it. The mark is down. It has been revolved along the axis, which, to a two-dimensional being, would be inconceivable.

"I think that New York, like my bit of paper, has been so revolved through a fourth dimension, along the time-axis, into the world which, so to speak, lies on the other side of the paper. Do you see?"

"I get the idea," Powell said, "but it's just a theory. The mechanics—"

"Are impossible to our Earthly

science. But we are not on Earth. These vague forms you saw in the sky are, I think, the inhabitants of this other continuum."

"Big," Hector put in.

"Size is relative. Dinosaurs were big. Microbes are small. On a huge planet the inhabitants would naturally be proportionately large."

"No. But what's behind all this?"

"I can't tell you," Eberle admitted. "There must be some good motive. Intelligent beings do not act irrationally. Not scientists, anyhow. Search for an Earthly parallel, Powell."

"Eh? There isn't any."

"There are plenty," Eberle said very quietly. "Fruit-flies, for one. In lab-

Owen crumpled to the ground (Chapter XVIII)

"Gravity would be increased on a gigantic planet," Powell argued.

"Why? Density isn't a matter of size. What about neutronium? What about the dark stars? The red stars? Or this huge world might be hollow, a mere shell. The inhabitants would then be quite diaphanous. Gravity isn't change, is it?"

oratories we make genetic experiments, exposing fruit-flies to X-rays and watching the effect on the germ plasm. Wholesale mutations aren't a normal condition."

Powell caught his breath. The sheer magnitude of the idea appalled him. It was horrible! New York the subject of an experiment by a race of titans?

"It is a good parallel," Eberle went on. "I believe we have been exposed to some ray or force that caused mutations. Even now we are probably being watched. The results of the experiment are being checked, if there are actual other dimensional scientists performing tests on us."

" A ray?" Mike asked, wrinkling his brow. "What makes you think it's a ray or some force like that?"

"A little rationalization," Eberle declared.

"But why a ray? There's some unknown force at work, I'll grant you. So many mutants certainly aren't normal. But why can't it be uh—a space warp, a new ingredient in the atmosphere, or—"

EBERLE raised his muscled bulk quite strongly on one elbow.

"Your reasoning is almost entirely intuitive. There hasn't been any alteration in the air. You told me that yourself. Even if you hadn't, there's still the fact that mutants were being created for some time before the dimensional shift.

"No. That hypothesis doesn't work. There is some radiation effecting the change. Instruments will probably detect it, though our present instruments, I believe, can't analyze it. Lead, in practical thicknesses, is useless. My opinion, you see, is that the radiation is allied to radioactivity, and, therefore, lead would be the only possible shield against it.

"I encountered the effects quite a while ago. Only, I couldn't discover its source. Naturally. It came from another dimension."

The cameraman stared at the wall speculatively. For a long while they were silent. Then, slowly, Mike's eyes cleared, and he turned to Eberle.

"That sounds reasonable. What's the point of it, though?"

"You've seen it, and I've already told you," Eberle stated irritably. "I believe New York is being made the subject of an experiment. We have an idea of how it is done. We don't know who is doing it, except that logic points at the huge shadow-people, if that's what they are. The motive is another matter, though not too difficult to imagine, if the inhabitants of the dimension are scientists."

Powell's back felt cold and sweaty.

"Boy, what horrors you're giving me! I feel like a bug under a microscope."

"There would be microscopes of a sort, of course," Eberle nodded. "However— You say you have film records of recent events in New York? Records of these mutations? I should like to see them. After all, I'm a better scientist now than I ever was. Not that it'll do me much good," he finished wryly. "Well, can I see those films?"

"I'll call Moulton," Powell said. "He'll check your condition."

But Eberle's recovery had been amazingly swift, aided, perhaps, by the inexplicable force that had so strangely developed his brain. He insisted on getting up and following Powell to a projection booth, while Hector went off to secure the film cans.

"As for my kidnaping," Eberle said, "there's nothing mysterious about that. Your criminal robot, whom you call the First, simply wanted to get control of a space drive principle which would enable his pirate ships to rule the System. I was taken to Venus, first, to throw possible pursuers off the track, and, second, to get rid of my ship. The First will probably build ships of his own in secret places. No doubt he learned my space drive formula by giving me truth serum. I don't remember that, of course."

"Well, you're in danger," Mike remarked. "As long as you're alive, the First won't have a corner on these super space ships. You'd better keep under cover."

Eberle grunted contemptuously. "I can handle a heat-gun. I certainly won't hide. There's too much to do. Is this the film?" Hector had reappeared.

"Yeah. I'll run it!"

Deftly, Powell went to work. Across the projection room the screen had changed from silver to black. Pictures began to flicker across it, three-dimensional, realistically colored.

"We meet the craziest people, folkses!" A commentator's voice broke

in rudely. "Just look at this. They ain't kangaroos. They're rabbits!"

On the screen the animals didn't look much like rabbits, bounding about inside a wire enclosure. For one thing, they were four feet high. For another, instead of floppy ears, they had a gently waving group of filaments that looked like antennae. They sat on their hind legs, like kangaroos, and jumped incredibly high.

ANOTHER picture supplanted the unusual rabbits. A March of Events reel showing the progress and eventual failure of a gigantic blackmailing scheme, all within a month. A view of a monosomian, a baby with two heads and a single body. Another of a monosoma, just the reverse. A red, wrinkled infant with one eye in the middle of its forehead—a Cyclops.

"We never released those," Powell said. "Too strong." There was the shot of a banker who had suddenly gone mad.

"Insanity has taken an upward swing in New York lately," Mike said. "Doctors can't figure it out."

"All these things indicate a form of development," Eberle said thoughtfully, "evolution rather than the reverse. There is no real degeneration."

"What about the monsters?"

"Experiments. Mutations. Those rabbits evolved. Look at that!" He pointed to the screen, where a kingsnake covered with a downy growth of pin-feathers was coiled. "Potentially, every scale on that reptile's body was an embryonic feather. But a controlled ray that speeded up evolution would have more uniform results. There is no single effect. That's what puzzles me."

The pictures continued. Eberle did not speak till a humorous commentary on a spiritualist seance had been shown.

"Dunno how that got in," Powell grunted. "Mistake, I guess. It isn't important."

"You're wrong!" Eberle snapped. "It's damned important! Run it again."

Again the spiritualist, a Mrs. Felipa Cardotti, appeared in three-dimensional color. She was a buxom, swarthy woman with jet black hair and a mobile, vividly scarlet wound of a mouth.

"These voices, they are spirits, yes," she declared seriously to the photographer. "I have never heard them before. It has always been difficult to get across the veil, but now I hear the whispers of the unseen day and night. They are confused; I can understand little. They plot and plan something, I do not know what—"

"I want to talk to that woman," Eberle said swiftly. "How can I get in touch with her?"

"Why, I'll take you to her place," Powell responded, his face stiff with amazement. "But she's a faker. She's been arrested a dozen times!"

"She *was* a faker," Eberle pointed out. "The potential power of telepathy existed in her mind. Something has developed it. She hears voices, but not spirit voices. The question is, what does she hear?"

"You tell me. What?"

"She hears thoughts. Certainly not human thoughts. We haven't changed, individually, that much in so short a time."

Eberle paused uneasily.

"Whose could they be, then?" Mike encouraged.

"The thoughts of beings that are not human. Shadows, Powell, shadows in the sky! The creatures that captured New York and are using it for experimental purposes. If anything could prove my point, her testimony should. We're going to see her!"

CHAPTER XI

Slave of Slaves

MRS. FELIPA CARDOTTI lived in the Bronx, in a fifth-floor apartment that smelled strongly of garlic and lentil soup. A fly-specked sign downstairs advertised her as "Great Mind Reader and Psychic."

A dark, slatternly woman answered their ring. A turban, hastily donned, was cocked askew over one eye.

"Yes? You want me?"

"Mrs. Cardotti?"

"That's me," the woman nodded.

"You wish a consultation? Come in."

"We don't exactly want a consultation," Powell began, entering close behind her.

Mrs. Cardotti swung around, her eyes blazing.

"Not police, are you?"

"Oh, no," the cameraman reassured her. "We're scientific investigators. We'd like some information. We'll pay your regular fees, of course."

"Yes." Cunning grew in the woman's face. "Well, sit down." She deposited her bulky body on a sleazy sofa, fumbled in her pocket, and popped two aspirin tablets in her mouth, grimacing.

"Headaches," Mrs. Cardotti said, removing the turban. "They been awful lately. Since the—the voices."

Eberle leaned forward. "That's what I want to ask about. These voices. Just what—"

"I don't know much," she broke in hastily. "They come and go. Spirit voices, all mixed up inside my head. Pictures, too, sometimes."

"What sort of pictures?" Eberle demanded eagerly.

"They're mixed up, too. Like dreams. Walls, like tunnels under the ground, and people moving around. Funny people."

"What do they look like?"

"I—don't know. It's hard to remember, except that they're funny. And they change, like in dreams. Arms that reach way out. . . ." Mrs. Cardotti frowned, searching her memory. She shrugged. "It's so hard to remember."

"You've had these manifestations only recently?"

"All my life I have been psychic," she said indignantly.

Eberle made an impatient gesture. "Of course. But these new voices. They *are* something new, aren't they?"

"Yes," she admitted, rather unwillingly. "Only in the last few months have they come. Now they come very often. I am always tired, they come so often and bother me."

"Do you feel any emotions?" Eberle shot at her. "Fear? Curiosity?"

"Eh— No, I am not afraid in those dreams. I feel something, yes. But not fear."

"Try to think," Eberle begged.

"It is hard for me to remember. There is always a feeling of something I must do, some duty. I am not always the same person. But there's always the same urge. Something I must do—"

"What?"

"It's different. Sometimes I feel I have to dig. In tunnels. I have to reach—" Mrs. Cardotti paused. Her gross body seemed to sag down on the sofa. Her black eyes grew dull.

"The voices," she murmured, and was still.

HER frame shook convulsively. Powell felt a curious sense of uneasiness. He had seen seances bebefore; he had interviewed fake psychics. Mrs. Cardotti might be acting. But Eberle was leaning forward tensely, his gaze riveted on the woman's swarthy face. The scientist was no gullible dupe.

"What's up?" Powell asked nervously.

Beside him, Hector moved uncertainly. "Boss. Something, I feel something—" he said.

Were the Redlander's other-worldly senses attuned to the "dreams" of Mrs. Cardotti? Hector's manifest unease did more than anything else to shake Powell's skepticism.

"Shut up!" Eberle snapped, and bent toward the woman. "Mrs. Cardotti," he said, "can you hear me?"

The psychic stared blankly at nothing. She seemed relaxed in every muscle. And yet, oddly, there was an inexplicable tenseness emanating from her. Powell thought suddenly of a microphone, with microscopic wires strung to tautness, ready to catch vibrations unheard by the duller human ear.

"I hear you," the woman said dully.

"Do you hear anything else?"

"No— Yes. Voices."

"What do they say?"

"They say—hurry. Work. Obey, always."

The scientist frowned. He glanced quickly at Powell.

"Do you see anything?"

"The walls, the rock walls of the very big, long tunnel."

"What are you doing?"

"Digging." Mrs. Cardotti paused for a moment, and then said something that brought Powell to his feet, wide-eyed.

"Digging," she said. "With my claws. . . ."

Claws! With natural human egotism, Powell had unconsciously assumed the mysterious aliens were anthropomorphic. Intelligence and *homo sapiens* went together. But, the cameraman smiled crookedly, why? Life in another continuum would not necessarily follow terrestrial patterns. Indeed, all the chances would be against that. Yet a vague horror crystallized suddenly in Powell's brain as he listened.

"What do you look like?" Eberle urged. "Can you see yourself?"

"I must obey. I must work. We have almost conquered. The giant ones are not far away. Soon we shall penetrate their walls and slay them all."

Mrs. Cardotti shuddered convulsively. She fell back, gasping and choking. Mike ran off for water. Deftly, he made the woman drink it.

BUT she could add nothing else when she recovered. Her memory seemed temporarily gone, at least her remembrance of the strange voices. After futile attempts to arouse some cogent memories in her mind, Eberle shrugged and nodded toward the door. The three men left, puzzled and wondering. They took a taxi downtown.

"I want to see those birds, or whatever they are, at the Battery," the scientist said. "My theories seem fantastic but they are being confirmed."

"How does Mrs. Cardotti tie up with it?" Powell asked. "Did you find out anything?"

"I did. She said something extremely interesting. Remember?"

" 'We have almost conquered'?"

"That, and the reference to giants. Mrs. Cardotti is getting thoughts from beings in this new world into which we've come. She has become a true telepath, under a certain unknown stimulus. But— Giants!" Eberle scratched his mop of iron-gray hair. "I wonder! The shadows we saw in the sky are shadows of giants. If Mrs. Cardotti is getting their thoughts, there's a race of inconceivably huge giants in this world as well. But I don't think so. I believe she's receiving the thoughts of smaller beings who are attacking these Colossi."

"Smaller beings?"

"Larger than we, perhaps. Small compared to the Colossi. I have an idea, Powell, a theory that's pretty incredible. But it's supremely logical. Perhaps—"

The taxi jerked to a stop. "End of the line, I guess," the driver turned to say. "The street's blocked off."

A rope was stretched before them. From the distance came the sound of shots and a shrill, high whistling that puzzled Powell. He got out, paid the cabman, and hurried toward a National Guardsman who stood, rifle in hand, at the barrier.

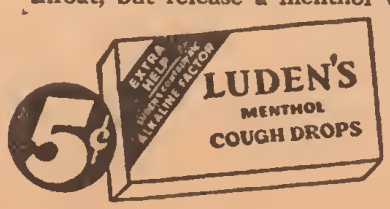
"Can't pass," the fellow said.

"Here's my ticket," Powell grunted, exhibiting his well worn press card, and

[*Turn page*]

CLOTHESPIN NOSE

Sensational *extra* help for colds—with Luden's! These famous cough drops not only help soothe throat, but release a menthol vapor—which, with every breath, helps penetrate clogged nasal passages, helps relieve "clothespin nose!"



Copr. 1940, Ludens, Inc.

ducking swiftly under the rope.

"Okay. Got a gun?"

"Yeah."

"You'll need it," the guardsman said ominously. "Better keep out of sight. I haven't seen the things myself yet, but I hear they're plenty bad."

"Got your camera, Hector?" Powell asked. "Keep it handy."

The Martian tapped a compact kit strapped to his belt. Eberle was already hurrying impatiently down the street.

"The street's blocked down a ways," the guardsman called after them.

It was. A hastily constructed barrier of furniture and packing-cases rose in a low wall from sidewalk to sidewalk.

NO one was in sight, but the chatter of machine-gun fire came louder. The three men squeezed through gaps in the ramp.

They rounded a corner and saw a small band of soldiers slowly retreating, rifles barking. Beyond them something came running.

A gray, leathery-skinned horror larger than an ostrich, it raced on legs like an ostrich's, with reverse knees. Its serpentine, skinny neck curved in an S. The tiny head was flattened and V-shaped, with the tubular muzzle of a sea-horse. Atrophied, featherless wings beat the air as the thing charged.

"Get it, Hector!" Powell snapped. The Redlander bent over his camera. Eberle was staring, open-mouthed.

Some of the soldiers were wearing gas masks. The need for this became evident as a mist sprayed suddenly from the bird-thing's muzzle, a yellowish vapor that shot out for twenty feet and more. One of the khaki-clad men, unprotected by a mask, screamed and fell writhing to the street.

"There's more of 'em," Powell said, unlimbering his gun. He took a shot at the bird's head and missed. Whistling shrilly, the creature ran on. Behind it, emerging from a side street, came three more.

Slowly, in good order, the soldiers retreated. But in the face of those charging juggernauts they had little chance. Powell saw the dull red flare of a heat-gun blast, and realized that the weapon's charge was almost exhausted. He searched anxiously for shelter.

Before he could find it, hell broke loose. From a window overhead the murderous rattle of a machine-gun stammered viciously. The soldiers, having led their opponents into a trap, dived for cover in convenient doorways, whence they poured a murderous fire on the birds.

But the monsters were hard to kill. Apparently their leathery bodies were not easily vulnerable. It was almost impossible to hit the tiny, darting heads. Yet one of the bird-creatures was felled. It lay, kicking convulsively, poison spray fountaining from its muzzle.

A giant bird broke past the barrier of gun-fire, charged straight for Powell and his companions. Its clawed feet pounded on the pavement toward them like the drumming of doom.

CHAPTER XII

Death and the Law

THE street exploded into a blinding blur of action. Powell had a confused vision of men running frantically, of gunsmoke clouding up from nowhere, shouts, cries, the freaks' screaming hisses.

Dwarfing everything else, the ungainly body of the monster rushed upon him, with the mechanical, relentless charge of a machine.

The thing could not be stopped! Those huge legs pumped inexorably, inevitably. The neck stretched forward viciously.

Powell could see the leathery grayness of the skin, the lines and wrinkles that marred it. Black, glittering, gem-like eyes glowered at him. Shrill in his ears came the menacing hiss. . . .

He was surprised to feel his gun jolt against his palm. A reflex action had leveled and fired the weapon.

Strangely, he didn't feel like Mike Powell, who was standing here in the path of the monster. He was a disinterested spectator, someone who heard

the tumult and witnessed the chaos from a far distance. Only two things existed: this stranger who was firing Mike Powell's gun, and the great gray bird that towered gigantically above him.

Again the gun kicked his hand. The monster shrilled, banged its stumpy wings against its sides, scrambling furiously at him not fifteen feet away. From its muzzle shot spray.

Simultaneously, Powell's third finger contracted; his index finger lay along the barrel of the gun to steady it. The weapon cracked and jerked up. Smoke coiled from the bore.

The bird's flat head was shattered. The serpentine neck writhed and lashed. Blood spurted from it.

Still the thing charged on. As Powell leaped aside, a crushing blow from one of the featherless wings smashed him down. He fell heavily on his side against the curb. Coughing and choking, still gripping the gun, he lay there, an acrid odor strong in his nostrils.

Hands were on his shoulders, dragging him away. He was half carried into a doorway and up stairs. The room in which he found himself swayed dizzily; then it steadied. He looked around.

Hector, Eberle, and a soldier in khaki were at the window, looking down. Powell joined them. The street below was a shambles. All the birds lay dying, kicking and struggling. A few human figures were there, motionless. Yellowish, tenuous gas drifted before the wind and dissipated.

Gunfire came from the south.

"God Almighty," the soldier said.

HIS young face was white. He began to curse the birds, softly, dispassionately.

Eberle squinted at Powell. "You're all right. Got a whiff of the poison, that's all. We can go down now. The gas is about gone."

Powell shook his head dizzily.

"Hector—" he began.

"Yeah, Boss. I canned it." The Martian patted the camera at his belt.

"Okay. Let's get some close shots."

In the street the soldiers were already reforming and heading south. Hector, Powell, and Eberle remained to examine the dead birds. The scientist's eyes held an excited gleam.

"It's the ray at work," he said, his stubby fingers probing at a shattered, grayish head. "These were birds once. Sparrows, for all we know."

"Sparrows!" Powell's voice was horrified.

"Birds and reptiles, they're akin, you know. This is a combination of both."

"But—"

"What about the pterodactyl? And the archoeopteryx? Prehistoric, of course, but combinations of bird and reptile. These things were once ordinary birds. Not so long ago, either. They had in them certain potentials—growth, and the development of glands manufacturing venom. Like the ringhals, the spitting cobra. The ray that's bathing New York let these potential factors develop. I have seen enough. I want to go to the Tower now. Their telescope will help me."

"All right," Powell assented. "I've enough pix, anyway."

But on the way uptown he had a better idea. He paused long enough to phone the Tower and request certain information be sent to the Summit offices.

Back at headquarters, Powell sent his new films to be developed, ran off the reel of the robot on the televisor screen, and checked over several messages that had been sent in. One of them was from Martin, the ex-burglar, who, at Powell's instructions, had watched Dr. Owen's apartment. He was on the track of the electro-physicist. He said he'd call in and report shortly.

Meanwhile, the Tower observatory had delivered a package for Eberle. The scientist unwrapped it, removed dozens of large photographs, and spread them out on the floor, fitting them together like a jigsaw puzzle. Powell watched him speculatively.

"It's a sky map," Eberle explained, crawling about rapidly on hands and knees. "Let's see. Number seven belongs here. Yes. Only there isn't any sky, of course. These are photographs taken through the telescope. If we're in a giant world, as I am compelled to

think, this will show what it's like."

BUT Powell was disappointed at the result. The photographs were hazy and indistinct. Pieced together, they obviously showed something, but refraction and other adverse conditions were a serious handicap. Yet certain objects were distinctly visible, and certain blurs were suggestive.

"Moving objects. The Colossi, I suppose. Can't you imagine it as a vast room, Powell? Say, a sort of laboratory?

"These could be walls. These brighter patches, like nebulae, are lights in a ceiling tremendously far above us. This thing blotting out a quarter of the sky might be a microscope, focused on New York. And these— Machines."

Eberle fell into a brown study, abstractedly jotting down notes on the back of an envelope. He looked up at last.

"I need a calculating machine. And paper, plenty of it."

"You mean you can make something out of that hodgepodge?" Powell said.

"More than you'd think. The ray developed my brain tremendously, you know." Eberle's blue eyes hardened. "The science of these Colossi can't be so alien. All science is necessarily founded on similar natural laws. And this picture has given me a clue."

Hector yelled for Powell to come to to the televisor in the adjoining room. It was Gwynn, the boss of Summit.

"Did you get the bird pictures, Mike?" he asked. "Good. They've all been killed, by the way. But there's some new creatures popped up. Everyone's been ordered off the streets. Where in hell is all this going to wind up?"

Powell moved his shoulders helplessly and switched off. Eberle, at work on the calculators, had no use for him at the moment. So Mike wandered to the great televisor exchange where machines took calls from all over the city. Grimly he watched and listened.

The birds were dead. But there were other menaces. A blue, pulpy, enormous thing had crawled up from the dry bed of the Harlem River and was pouring like a tidal wave downtown, jamming Broadway from sidewalk to sidewalk.

Huge centipedes were creeping through the streets. They were twenty feet in length, covered with nearly invulnerable chitin, and only the dangerous resource of poison gas could kill them. Gas masks were being issued to the populace.

The monsters grew—and hungered!

Toy aquariums were sources of immediate menace. Frightful life sprang from them—plants that burst up and withered with equal speed.

The guardsmen fought fire with fire. Armed with riot guns, they fired CN or tear gas shells. They used the CN-DM candles which caused more destruction than grenades. The streets became hell.

The monsters could be destroyed, but at the expense of civilization. When it was least expected, a respite came. The abrupt influx of the terrors ceased. The ones raging in the streets were killed. New York prayed against more, but it had little hope.

The Colossi had shut off their ray, Powell thought. But for how long? Manhattan could not survive many such attacks. His helplessness sickened him.

A message came from Martin, the ex-burglar. He had located Dr. Owen and had trailed him to a house near Central Park. He was televising from a drug-store near by. What should he do now?

"Wait," Powell said. "I'll be along pronto. Keep your eye on him!"

Hurrying along the hall, he met Eberle, whose ruddy jowls were quivering with excitement.

"I need a ship, Powell," the scientist cried. "A rocket ship!"

"They've all been grounded."

Eberle gestured that aside.

"This is important! I need a ship, and a crew to make repairs."

Powell wrote a note on a scrap of paper.

"Take this to Gwynn. He'll fix you up—if you talk fast enough to convince him. I'll be back. Adios!"

But in the street he ran into more trouble. The happy, excited voice of

Sue Clark cried out triumphantly.

"There he is! Grab him!"

Somerset, the IIB ace, gripped Powell's arm. "You're under arrest," he snapped. "For murder!"

CHAPTER XIII

Lair of the Robot

POWELL didn't move. He looked around slowly. Sue Clark was standing there. The radium snapped in her green eyes, and her red hair was windblown. Beside her, round-faced Lynn Plumb stood trying to suppress a grin. Somerset had no expression at all on his sunburnt countenance, but his icy blue eyes were knife-sharp. Being arrested by the man who had killed the Spacehawk gave Powell an unpleasant tightening of the throat.

"Murder?" he asked. "I don't get it."

"Man named Haverhill," Somerset said. "At the Sun Sanatorium. Poison. Why did you duck out?"

"But Haverhill poisoned himself!" Powell blurted. "Did you look at that ring on his finger? He committed suicide!"

"He wasn't wearing any rings," the IIB man responded. "Somebody fed him poison."

Powell's eyes went to Sue. She winked and looked seraphic. The cameraman nodded slowly.

"I see. Just out of curiosity, Somerset, tell me something. Did this dame get there before you did?"

"Yes. Why?"

Mike knew she had pocketed the ring. Why? To hang a murder charge on him? Hardly that. But if Powell was locked up on suspicion, that would leave a clear field for Sue Clark and her stooge, Plumb. They would pick up the trail where Powell left off and scoop him. That must be it!

"You doublecrossing little chiseler," the cameraman grated. "You'll get yours for this."

"Why, Brain!" the girl said sweetly. "You shock me. It's a clear case, isn't it, Mr. Somerset?"

The IIB man pushed out his lower lip. "That'll be proved or disproved later. Powell, where's Eberle and your Martian friend?"

Mike hesitated. He made a quick decision. It meant taking a long chance, with Sue and Plumb within hearing, but the minutes were passing too swiftly.

"Somerset, I'm on the trail of this super-criminal of yours now. If you jerk me off to jail, I'll lose Owen, and I've just found him! I can prove I'm innocent of Haverhill's murder."

"Where's Eberle?" Somerset repeated stolidly.

"Will you listen to me a minute? For God's sake—"

"All right," the IIB man said without emotion. "Make it fast."

In a rush of words, Powell told his story, leaving out all but the essentials. Sue and Plumb listened avidly. Somerset's brown face was expressionless.

"Sorry," he said at last. "You've got to come down to headquarters." He nodded toward a sleek black car at the curb. "Get in."

Powell's heart sank. He looked around desperately, but the street was empty. If only Hector would appear!

Somerset suddenly held a gun in his hand. Rapidly he searched the cameraman and removed his automatic. He gestured toward the car.

"You'll drive."

Powell sullenly swung under the wheel.

"We'll go along, if you don't mind," Sue said. Sue put her hand on the door handle.

SOMERSET was clambering somewhat stiffly into the front seat beside Powell.

"Sorry," he said. "This is official business."

"But you'll need witnesses."

"We'll get in touch with you," the IIB man said, and laid his gun crosswise in his lap, pointing at Powell. "Start her up."

Angrily, the camerman touched the starter.

"Don't move, Mr. Somerset," Sue ordered tensely. "Careful!"

"For God's sake, Sue!" Plumb gasped. "What're you doing?"

"Shut up!" the girl snapped. "Put up your hands, slowly. Leave that gun in your lap."

Powell jerked his head around, saw that Sue held a tiny, pearl-handled heat-gun in one hand. It was pointed unerringly at Somerset's ribs.

The agent, with a wry smile, lifted his arms.

"All right," he said. "You can go along. Put that thing away."

"Get out!"

"Now, this is going too far," the IIB man threatened.

"Get out!" she repeated. "This gun isn't a gag."

Somerset obeyed. Sue slid into the front seat beside Powell, her gun still covering the agent.

"Lynn, get in the back. Shut the door. Brain, start going."

Powell waited for no more. He gunned the motor and sent the sleek black car hurtling along the street. In the rear-view mirror he saw Somerset running after them, with a stiff, jerky stride, his mouth open in a shout. Then they whirled around a corner and the IIB man vanished.

"What are you laughing at?" Sue demanded furiously.

"You."

"You ought to be grateful."

"For what? You drum up a murder charge against me—you've probably got the poison ring in your pocket—and then hold up an IIB man to get me out."

"You shouldn't have done it, Sue," Plumb croaked from the back seat.

"Oh, quiet! You know why I got you out of it, Brain, don't you?"

"Sure. You want to horn in on my scoop."

"And I'm going to," Sue said, significantly toying with her gun. "Keep your appointment with that burglar."

Powell considered. He had already wasted much time. He might refuse to obey the girl, but what good would that do?

It would simply mean delay, while Dr. Owen might escape, if he had not already done so.

"Okay," he said, swerving toward Central Park.

The streets were for the most part empty of life, though occasionally they swept past bodies of men and monsters. At one yellowish, pulpy corpse, Sue shuddered and turned greenish. Powell noticed that Plumb, in the back seat, was using his pocket camera from time to time.

Powell grimaced, and then, as a thought struck him, laughed ironically. Habit made him think in terms of scoops. But what good would a scoop do on this alien world? There simply wouldn't be any market. And the chances were all against New York being returned to its former position on Earth.

YET there was that chance, a forlorn, single one, and that was why the vast organization of Summit Newsreels continued to function under pressure. The boss was a newsreel man to the core. Like Mike Powell, Gwynn was the kind who'd take pictures while falling into the crater of Vesuvius, and then try to throw the camera over the rim where someone might pick it up.

Central Park looked unfamiliar. The grass was growing abnormally fast. Some thickets were tall as bamboo clumps. The trees were strange—twisted, gigantic monstrosities that bore little resemblance to oak or maple or elm. Their leaves rustled, though there was no wind at all. Vines lay across the sidewalk, stretching out tentacles large as a man's leg, mottled with scrabrous reddish patches and overgrown with fine cilia.

Powell parked the car by a drugstore. He got out, and Martin emerged from a nearby doorway.

He hesitated, with a questioning glance at Sue and Plumb, who were at Powell's heels.

"They're okay," the cameraman said. "What's up?"

"Nothing much. Dr. Owen hasn't showed. He's still in that house."

"Well, then, let's go in after him," Powell said.

The house was a glass-brick, two-story cottage cramped between apartment buildings. The lock yielded without much difficulty to Martin's skilled fingers.

Silently, the four entered.

It looked like an ordinary residence, well furnished, and containing nothing to excite suspicion.

"Owen isn't here," Powell said disappointedly. "You must've missed him.

Martin was examining the windows, adjustable glass shutters constructed like Venetian blinds.

"He couldn't have got out except by the back door. I'll check that." The ex-burglar returned after a moment. "No. I stretched a piece of thread across it from the outside, and it hasn't been broken."

"Too bad I haven't some X-ray glasses with me," Powell lamented.

"We don't need 'em." Martin began to go over the house foot by foot, testing walls and floors with delicate fingertips. Plumb wriggled impatiently.

Sue sat down on a couch of flexible glass and winked at Powell.

"So the Brain's baffled, eh?" she observed.

There was no time to answer. Martin's voice came, excited and triumphant.

"Here's a panel that's—look at this!"

Part of the wall was sliding aside, revealing a flight of stairs descending underground. The depths lit up as the panel opened.

"Got a gun, Martin?" Powell said. "No? How about letting me use yours, Sue?"

She shook her head determinedly. "I'll hang on to it, thanks. Lynn, you wait here. Keep your eyes open. If we call you, come after us."

Plumb nodded, and the three others warily began to descend.

STAIRS gave place to a passage that ended in a metal door. This swung open under a push. On the threshold, Powell stopped short.

"It's too easy," he said in an undertone. "I don't like it."

Sue edged past him, her gun ready. They stared at an immense laboratory, illuminated by radiant bars set in the roof.

The room was huge, but barely large enough to contain the equipment that filled it. Pipes and wires writhed across ceiling and metal-sheathed walls. A televisor stood on a littered table near by. There was a transparent panel in the floor by the door. Looking down, Mike stared into another room, almost filled with a crouching monster dynamo.

This, seemingly, was the robot's power house.

The laboratory itself was amazing. Some equipment was recognizable; others told of extraordinarily advanced scientific knowledge. The globe-topped towers of an atom-smasher nearly brushed the ceiling. Eyeing the device, Powell felt a sudden thought pass through his brain, so fleetingly that it was gone immediately. An atom-smasher— What associations did that have?

Powell didn't know, but he felt it was important. He filed the idea mentally for future reference.

The three took little time to examine the laboratory. There was another door in the far wall, closed and cryptic. Quietly, they moved toward it.

It, too, opened under a gentle push. Beyond it was a smaller room, bare, save for a few pipes bracketed to the walls.

Across the room was another door. Powell started toward it, the others close behind.

And, suddenly, catastrophe came!

High-tension current whined. A panel in the wall burst open. From it a blunt metallic rod thrust out. The whine rose to a shrill skirling.

Sue cried out. The gun spun from her hand and clattered to the floor.

Powell's body jerked convulsively. Jerked, and stiffened.

Ice gripped him. Rigid, unable to stir a muscle, he remained frozen, seeing, from the corners of his eyes, Sue and Martin standing beside him, equally powerless, robbed of all strength to move.

The wings of panic began to beat through Powell's brain. He could no longer feel his body! He could feel nothing!

The door in the wall opened. Before them stood the creature they had come to find.

Silently, the robot gazed at his captives.

CHAPTER XIV

The Captor Escapes

HOPELESSNESS overwhelmed Powell. Why had he blundered into this obvious trap? He had been rushed into it—the arrest by Somerset, Sue's part in the developments, the necessity for speed—all these had contributed to rashness rather than to forethought. But Powell had known his enemy was no fool. He should have taken precautions.

The robot did not move. It was the same creature Powell had seen on the televisor screen. Seven feet from the floor was the top of its globular head, which sat directly on the cylindrical body, without a neck. The arms looked short in comparison with the long, thin bars of the three legs. The metallic torso glinted like a battleship in the cold light.

Faceted, expressionless eyes watched. The precise, toneless voice spoke.

"Conversation seems unnecessary at this point. There is nothing I wish to tell you, and my electric ray has paralyzed you so that you cannot speak." The globular head turned toward the blunt rod protruding from the wall.

Powell's throat contracted as he tried to force out words. It was impossible. He could merely gurgle unintelligibly.

"There is certain information I require," the robot went on. "I must know if my retreat is known to any others.

"This ray, incidentally, is not deadly. It transmits electric high-potential energy along a beam to your bodies. It blocks the synapses, so that your thought impulses, which are electrical in nature, cannot bridge them. A higher voltage would kill, but I do not intend to use this, unless, of course, you refuse to yield the information I ask for."

There was a scurry of racing footsteps. The robot moved swiftly. Its hand darted back out of sight through the doorway in which it stood. Simultaneously, a body crashed down to the floor at Powell's side. The face of Lynn Plumb, contorted and white, glared up.

Plumb remained in a twisted heap, unable to move, trapped like the others by the paralysis ray.

"I expected him, of course," the robot said. "My alarm system told me you had left one of your party upstairs."

Abruptly, a bell shrilled in the distance. An odd indecision came into the automaton's attitude. It swung half around, hesitated, and then without a word moved swiftly through the doorway. The panel shut silently after the gleaming body.

Behind Powell came a low thud. He guessed that the other door had closed, imprisoning the four humans.

Well, what now? Questions thronged the cameraman's brain. Where was Dr. Owen? What had called the robot away? Had the bell warned him of an intruder?

A movement caught Powell's eye. Plumb's foot was wriggling slightly. Were the effects of the ray wearing off? Powell strained to move, but found it impossible. A low rumble escaped from his throat as he tried to call out.

Again Plumb's foot moved. It stretched out toward the wall. The toe reached a metal pipe and hooked over it.

Apparently, not all of Plumb's body lay within the influence of the beam. He could move his leg—but would that be enough?

SLOWLY, very slowly, Plumb's knee bent. His foot hooked over the pipe; he was trying to drag his body out of the ray's range.

Inch by inch, Plumb pulled himself closer to the wall. One hand moved experimentally. And then the battle was over.

He gripped the pipe. With one painful wrench he jerked his body into the zone of safety.

For a moment he lay gasping. Then he rose, went warily to the rod projecting from the wall. He did not touch it. After a careful examination, he walked around behind Powell and fumbled with something that sounded metallic.

Then he reappeared. His cherub-

ically round face was intensely worried.

"I can't shut the damn thing off. And the door's locked. Can you talk at all, Sue, or you, Powell?"

With grinding effort, the camerman managed to emit a hoarse croak. His lips and tongue were paralyzed, but it was possible to force out his breath in an audible rumble that was mostly vowels. He did this a dozen times before Plumb understood.

"The other door? I'll try it." But the portal through which the robot had disappeared was also barred. "That's no good."

Powell thought frantically. The room was empty, save for the pipes and the ray projector. If the ex-burglar were free, he might be able to open the doors. Or if Plumb had Martin's tool— But the moment Plumb tried to get them he would fall under the ray's influence again.

"Barrier—block—ray," Powell grunted painfully.

Plumb guessed his meaning. He searched his pockets. There was nothing that might act as a non-conductor to the electric beam. Finally Plumb took off his shoe and carefully held it before the projector. Nothing happened.

Powell's frozen eyes searched every detail of the part of the room he could see, trying to find some means of escape. His eye fell on Plumb's tiny camera, still strapped to his belt.

"U-u-m-m," he wheezed.

"Yeah?"

It took nearly ten minutes for Powell to communicate his idea. With a doubtful glance at Sue, Lynn took off his camera and removed the spool of thin wire film. Unrolling this, he bound one end around a pipe that led down through the floor, and made a loop in the other end. Casting from a distance, he flung the coil of wire over the projector rod, lassoing it neatly.

THERE were instant results. The binding chains that fettered Powell vanished. Volition returned to him. He scooped up Sue, sent Martin rolling headlong with a frantic shove, and dived to safety. Almost simultaneously blue flame hissed and cracked. The wire melted under the high voltage. Once more the paralysis beam lashed out. But the four were out of its path, flattened against the wall.

"Short-circuited it," Powell said, gulping. "Lucky you were using wire film, Plumb."

"Lucky for who?" Sue snapped. "You ruined that reel!"

"Could I help it?" the cameraman asked reasonably. "Trust a woman to kick at anything. Martin, can you open that door?" He nodded toward the one through which the robot had vanished.

The ex-burglar sidled toward it, keeping out of the path of the ray, and went to work. Powell picked up the gun and held it ready, ignoring Sue's outstretched hand.

The lock clicked. The panel swung back. A dimly lit corridor stretched ahead.

It was empty, a metal-sheathed tube that led underground to some unknown destination. The four hurried along it. At one point they passed a tangle of

[*Turn page*]

knotted ropes lying on the ground, but this told them nothing.

They came to stairs and mounted them. They emerged on a landing facing a blank wall, which yielded to Martin's skilled fingers. Beyond the wall was a room, well furnished and also unoccupied.

From the windows they could see the street one story down. They were in the apartment house next door to the glass-brick cottage.

And that was that. The building had at least four exits. There was no trace of Dr. Owen or the robot. Questioning the desk clerk proved futile. The man that had rented the apartment was obviously innocent. No information could be obtained.

Driving back downtown in a taxi—they decided against using Somerset's official car—Powell told the driver to return to the Summit offices. Sue and Plumb remained glumly silent. They had little to show for their plot, and though Powell, too, was disappointed, he didn't show it.

He left the others downstairs and went up to his office, where he called the IIB office and told Stackpole, the chief, what had happened. Stackpole was willing to listen this time. He agreed to send out a squad to the robot's laboratory, and was sanguine about the murder of which Powell had been accused.

"If you're telling the truth, you'll be okay," Stackpole said. "I'll have Somerset recheck."

"And don't forget to cross-examine Sue Clark," Powell interjected, with a crooked smile. "She's tough, but if you give her the fourth degree she'll crack. She's down in the lobby now, I think."

STACKPOLE nodded and broke the connection. Relieved, Powell went to find Eberle, who was still busily covering sheets of paper with intricate calculations. The scientist lifted a leonine head at Powell's entry.

"You're back, eh?" he grunted. "Good. What happened?"

The cameraman explained in detail, but got little encouragement from Eberle.

"You're dealing with a scientific criminal genius," he declared. "I don't think the robot is, technically speaking, alive. He might have a human brain transplanted in his skull, but that's rather fantastic. Remote control is probably the answer."

Eberle turned to more important things. "I have seen Mrs. Cardotti again and used hypnotism on her. I've found out a good deal. We're in another world, of course, and I believe there are two races of intelligent beings here. The Colossi are our captors, the ones who transported New York from Earth into what I am convinced is their laboratory. The other race are enemies of the Colossi and are much smaller. How much smaller, I don't know. They are trying to enter the fortress of the giants and destroy them."

"How does that help us?" Powell asked.

"If we can communicate with the Colossi's enemies, we may get aid from them, or, at least, valuable information. Radio won't work. Telepathy isn't effective—I've tried it with Mrs. Cardotti as an instrument. She's a receiver, not a transmitter. To communicate with these besiegers of the Colossi, we must meet them face to face."

Powell grinned sceptically.

"That *can* be done," Eberle cried. "I'm having a rocket ship refitted, so it can utilize my space drive principle. It isn't difficult. In a few days it'll be ready. I'm going in that ship to find this other race.

"Look here!" He fumbled among his papers and held up a chart. "I've studied the Tower photographs of the huge laboratory in which we are, and plotted a course that will take me to a window, or a ventilator. I'm not sure what it is, but it seems to be an opening into the outer world. A rocket ship couldn't do it; it wouldn't handle responsively and quickly enough. But a ship with my space drive would do it."

Powell didn't give himself time to think. He didn't dare, or he might have backed out. "I'm going along," he said. "With plenty of film. Boy, oh boy! What a scoop this'll make!"

"Now I've done it," he thought. "Oh, Lord! Why do these things always

have to happen to no one but me?"

And Mr. Powell wandered out in search of a drink.

CHAPTER XV

Into the Unknown

PREPARATIONS for the flight were nearly finished. The cylindrical craft lay in its cradle atop the Airport Building, unheralded and unsung.

For obvious reasons, Eberle's plan had been kept hushed up, and the civilian population—and the military too, for that matter—continued to live in worried suspense. Despite reassuring messages often broadcast, the perpetual strain of living in a new world was terrific. It plainly showed on everybody.

Few monsters had reappeared since the last outbreak. The Colossi, apparently, were not using their strange ray. But how long the respite would last it was impossible to say.

More than a score of ships lay uselessly in their cradles, like fantastic growths on the high, broad roof.

The *Manhattan*, though, Eberle's commandeered ship, was loaded and ready for the take-off. The rocket jets had been plugged, and the new space drive apparatus installed. For the sake of secrecy, Eberle made the last connections with his own hands. Prior to doing so, he turned over to military authorities the formula he had perfected. Food, scientific apparatus, and Powell's invaluable camers were stored in the craft's capacious belly.

It wasn't a large ship, really. It was built for speed, a sleek, streamlined tornado of a ship, red as fire, with beautiful lines and high maneuverability. With the new space drive it would be even easier to handle. Powell knew, vaguely, that it was based on some sort of atomic reaction, with quantum energy as the motive power; but he knew little more than that.

He stood now leaning on the roof's parapet and staring thoughtfully out over New York. The port was nearly deserted. It was eight-thirty p. m. But the gray, silvery light still glowed from the depthless skies.

Behind Powell, a few workmen moved here and there. The cameraman was struck with the odd silence. Never, in any of the twenty-four hours, had New York failed to roar its theme song into his ears as a greeting.

But now New York was hushed. Brooding, ominous, strange, a pall of silence veiled the city. It lay precariously in the infinite void of an enigma, a familiar bit of the Earth ripped away and isolated in another Universe. Beyond the skycraper towers no ocean loomed; the cities and hills of New Jersey were vanished.

The blanketing, immeasurable grayness prisoned the lost city.

A few cars moved slowly. There was only one pedestrian in sight. In a window across the street, he could see a stenographer typing busily, a paunchy man behind her investigating the contents of a filing cabinet. Futile pretense of "business as usual!" Signs bearing that legend had appeared in many windows. But only the iron grip of martial law had so far saved the city from stark, suicidal panic. How long could the grip maintain its hold?

Not long, if the ray of the Colossi probed out again. Not long if the monsters reappeared.

SO much was gone, Powell thought, his gaze sweeping across roof gardens, now deserted, where orchestras had only lately played to capacity audiences. Suddenly the life that had vanished seemed very close to the cameraman. The many little, unimportant parts of it assumed significance and dearness.

Limousines used to ride proudly down Fifth Avenue. Remember the slum kids, naked under the hydrants? Harlem? The subway shops? The great boats were dreams slipping through the flat waters of the Hudson. The old arch of Washington Bridge . . . the enthusiastic shoeshine lads . . . Drinks and dinners in the Village by candelight were struggling memories.

"Oh, damn!" Powell said softly. "This is getting me."

He climbed the gangplank quickly,

swung open the port, and entered. He was in the control room. He went aft, into the compartment, his senses registering but not consciously realizing that a soft, quick sound had come to his ears.

Gray light filtered through the ports. The room was filled with bales and cases securely strapped and chained. Powell touched one, leaped back. He switched on the light.

Out of the shadows sprang a man. The glare revealed him. Like a fat Buddha he plunged forward, lashless black eyes distended, red lips twisted. It was Dr. Max Owen.

He gripped no weapon. But his vast bulk crashed against the photographer. Powell fell against the doorjamb. Agony bit into his back. Cursing, he writhed aside.

Owen's gross face was expressionless, a glistening, hairless mask. Silently he whirled, surprisingly agile despite his bulk, and swept out a huge arm in a crushing blow. Powell ducked under it and continued to give back warily.

What was Owen doing here? How much did he know about the Eberle space drive—and Eberle's plan?

There was little time to speculate. And less room to fight, in that crowded compartment. If they closed, the advantage would be with the heavier man. Powell was unarmed. He decided offense was the best defense, and smashed a blow into Owen's middle, following it up with a right to the chin.

The scientist lumbered back, grunting. He reeled across the threshold into the control room. As Powell leaped to follow, Owen wheeled, slammed the door shut.

Powell's shoulder drove against a wall of metal. He yanked vainly at the lock.

"Owen!" he shouted.

There was no response.

Had anyone else heard the noise of the fight? It seemed doubtful. But, spurred by the thought, Powell turned to the nearest porthole. He shot back the fastening, to swing the port open and shout for help.

He was too late. A shudder shook the ship. It lifted, settled back briefly, and rose again. This time it continued to mount.

It fled up from New York!

POWELL saw the city dwindle and vanish below. The terrific acceleration of Eberle's space drive shot the ship up like a meteor. New York dwindled. It jerked aside out of Powell's range of vision.

He saw fog, gray emptiness.

Cursing, he turned again to the door. Repeated shouts and knocks brought no answer. Powell sank down helplessly.

Owen was no registered pilot. How could he maneuver the craft in an unknown world? What was his motive in stealing the ship? How much did he know of Eberle's theory? What would it gain him? Powell had an answer for only one question.

In the control room were charts, painstakingly plotted by Eberle, showing the course the ship must follow in order to escape from the laboratory of the Colossi.

Powell had studied those charts, made from telescopic photographs. He knew that in one wall of the huge laboratory was an opening, and that across this opening lay a shimmering, glowing curtain of light.

Spectroscopic analysis had showed it to be a death ray, a radiation capable of destroying cellular tissue. Because of this, the entire surface of the *Manhattan* had been plated with protective, resistant armor, and the glass of the ports fitted with similar shields.

If Owen followed the charts, he could take the ship through the ray barrier. A child could operate Eberle's space drive after a brief instruction.

But what lay beyond? No one could guess that. The enemies of the Colossi, perhaps. Certainly an alien world—a world of giants, in which human beings would be ant-size.

Powell thought it all over very carefully. Whatever Owen's motive was, he was unquestionably the winner.

Mike drifted to the port and stared out hopelessly. The gray emptiness was still there, unbroken and changeless. It was, perhaps, due to some strange element in the atmosphere,

though the air was breathable enough, at least in New York. Within the ship, of course, purifying apparatus released oxygenated, washed air at regular intervals.

Powell wondered if the Colossi would notice the flight of the ship. To them it would be smaller than a fingernail, if they had fingers or nails. Certainly they could smash the craft with one blow. Its speed would be of no aid in escaping such an attack.

And yet the speed was tremendous, faster than Powell had ever traveled before. His eardrums and a peculiar, hot, tingling sensation in his body told him that. There was nothing by which he could judge the speed, but Powell was not surprised when a faint glow lit the mists far ahead.

The craft slanted toward the dim light. Out of the depths loomed a perpendicular barrier that stretched away limitlessly to all sides. The wall was broken by a veil of greenish luminescence, rippling down like a waterfall.

Toward the emerald cascade, the ship drove.

Shields dropped over the ports, shutting off outside vision. A sudden, grinding vibration shook the ship; it dropped like a wounded bird. Then it recovered and rushed on.

The *Manhattan* flashed out of the great laboratory, into the unknown!

CHAPTER XVI

Chat with the Enemy

PORT-SHIELDS remained in place. Powell stared at them with an intense longing to see beyond. Owen, in the control room, could guide the ship by telescreens operated photoelectrically, but the cameraman had no way of knowing what this new, outside world was like.

The thought of the vessel driving more or less blindly on its uncharted course frightened Mike. Nevertheless, he searched for a weapon. He found a compact, needle-beamed Jahvert, one of the best heat-guns made, and some extra clips, which he pocketed. After that there was nothing else to do but wait.

A long while after that, the *Manhattan* grounded. Time passed, and still nothing happened. The ports remained blinded. Did Owen intend to leave his prisoner here permanently? Starvation was no menace, nor the air supply, unless it was shut off. It was the unknown that made him anxious. Powell examined the door speculatively. Could he burn off the lock? Scarcely. It was tough beryllium steel.

Such a drastic course proved unnecessary. The door opened.

"Well, come out," Owen said, almost pleasantly. "What are you waiting for?"

Powell's gun was ready. He saw, across the threshold, the fat man standing unarmed, hands open at his sides. Owen's gross face, sweat-shining, was still expressionless.

A touch of apprehension chilled Powell. Why was the scientist so confident? What ace had he up his sleeve?

"Come in and sit down. I think an explanation is in order."

The cameraman gingerly crossed the threshold, but remained upright, leaning against the wall, his weapon ready. His gaze searched the control room. Guns were in their places in the wall racks. Owen had not even troubled to unload them, apparently.

"Explanations can wait," Powell said. "We're going back to New York. Now!"

"Well," grunted the other, "that's feasible." He nodded at a graph on a revolving drum. "Our course is charted. We can find our way back by that. But the ship won't move. I've taken care of that."

"You wrecked it?" Powell cried accusatively.

"Of course not," Owen snapped. "I've simply removed certain parts of the space drive motor and hidden them —most ingeniously, I might add. The ship won't run without those parts. And unless you do as I say, you'll never get back to New York." He followed the direction of Powell's gaze. "Oh, the wireless. I've dismantled that, too. It seemed safer."

THE cameraman stood quietly. But his mind was active. Eberle would no doubt rebuild another rocket ship and fit it with his space drive. He would come to the rescue. Whether or not he could find the *Manhattan* was a moot question. It would depend on how certain delicate instruments worked in this strange environment. He'd need time, though.

"Spill it," Powell said grimly. "I'm listening."

"Very well." The low voice was velvety. "You know, by now, that I have been in the employ of the First—the robot. I have been for some time. And now, I'm on my own."

Owen's black pupils glared dangerously.

"You've found out a good deal. But I've found out even more. Too much! I am a scientist, Powell, and no credulous fool. I worked for the First because it meant power and wealth, and because the First was a scientist greater than I. Greatest in the world—as I thought.

"So I obeyed. I arranged the kidnaping of Eberle to secure his space drive. I did other things. But, in the meantime, I theorized. That was natural. I came to certain inescapable conclusions."

"Well?" Mike pressed.

"The First's intelligence is not that of a robot. The First is a man, directing the automaton by remote control, perhaps. Who that man is I cannot say. But I am a psychologist. I have studied the case histories of many criminals. The behavior pattern of the First, as I charted it, checks with one man. That man is the Spacehawk."

"The Spacehawk's dead," Powell interjected.

"His body was not recovered. Also, the man had tremendous vitality. I don't know." Owen made a vague gesture with his pudgy hands. "As I say, I don't really know the First's identity. But I discovered that he had limitations, and that, for me, was nearly fatal.

"When New York was transported into this other continuum, I began to wonder. The First declared that he had been responsible for that experiment. I couldn't believe him. I had investigated, you see, and had come to certain conclusions. The First was the result of a mutation, a form of energy which developed the potential characteristics of his brain."

"That was Eberle's idea," Powell said.

"Eberle is shrewd. No doubt we came to the same conclusions. I realized that the First was simply the result of an experiment, and that he was a man, a human being. He was not unique. The potential ray might affect others similarly.

"I resented the part I had played in the matter. I felt duped. That was why I utilized beam-finders to locate the First's laboratory. It was vacant, but the robot arrived soon after, and there was—an argument." The red lips twisted wryly. "I had found out too much, therefore I was a menace to the First's plans. So I was made a prisoner. Eventually I escaped."

Powell nodded, remembering the pile of knotted ropes he had seen in the passage beyond the robot's laboratory.

"After that, I was in constant danger. I had no idea who the First was. You can't hide from a man you don't know.

"Besides, I was wanted by the IIB. You were responsible for that, Powell. Consider my predicament. Where could I hide, in a city under martial law, a city from which nobody can escape?"

"You've escaped all right," the cameraman said.

"To save myself. I do not intend to remain here. New York must be returned to Earth. The First must be destroyed. I have no idealistic motives in this. I'm only trying to protect myself.

"So I snatched at Eberle's idea of entering this new world in order to find a weapon I could use to kill the robot. Undoing the effects of this monstrous experiment will also benefit me. I want to find a certain element—the element that activates the ray of this race of giants. That is the key to the problem, I believe."

OWEN leaned back, interlacing his fat fingers over his large, solid, bulging stomach.

"I could have killed you, but this is no doubt a dangerous world I must search. You are young, strong, and capable. You can help me. If you do not wish to do so, the decision is in your own hands." The scientist shook his head vigorously. "But you can't move the *Manhattan*. We're working for the same end, and personal feelings should not enter into it. Well?"

Powell considered. The other's words were supremely logical. Putting personal emotions aside, there was no reason for refusing to comply. What other course was left? Powell could only remain locked in a powerless ship, waiting while Owen explored this new world. More important, the cameraman was burning with curiosity to see and film the mystery outside the *Manhattan's* insulated walls.

"Okay," he said. "You'll probably doublecross me without hesitation at the first chance, I suppose."

"Doublecross you?" Owen's eyebrows lifted in surprise. "Why not? As long as we are working for the same end, we can help one another. But if our goals conflict, I must be logical." His bulky figure stirred uneasily. "Unseal the ports, then. I couldn't see much on the telescreens."

Powell obeyed, conscious of a feeling of unbearable anticipation. A world on which human eyes had never looked lay outside the ship. What would it be like?

The shutters clicked back. Disappointment struck the cameraman. He frowned at swirling grayness. Owen was at another port, eyes narrowed, lips retracted.

"Look," he said quietly. "The fog is opening up."

A wind swirled the vapor away. Flaming, blinding light, with a faintly bluish undertone, dazzled the men. Powell recoiled, squeezing his eyes shut. He grabbed for the lever that shut the port-shields.

"Goggles," Owen ordered. "There is considerable ultra-violet in that light. Did you notice the sun?"

"Notice it? Hell!"

"Very large and very bright. This is not an old world, in cosmic terms. Its sun has not yet burned down to a yellow star like our own. That may account for this strange element of mutation. The fires of creation have not yet died in this system."

Powell had found protective goggles. He handed a pair to Owen and donned one himself.

"We will need protective suits, too, or we'll be burned alive. You have some?"

Powell nodded and began to search through cases.

"Could this ray emanate from the sun itself?" Owen mused audibly. "Perhaps the giants concentrated its radiation in their laboratory. Yet there was no trace of such a device. I wonder—"

With considerable difficulty, he squeezed his huge frame into a lightweight, pliable protective suit, and slid the transparent hood over his head.

"Now the ports again."

Once more the shutters clicked. The two men looked out into a world where the sunlight, though no longer blinding, was dazzlingly bright.

THEY saw a rising plain at the foot of which the ship lay. The slope rose gradually for perhaps a quarter of a mile, and then jutted up sharply to a precipitous cliff that towered hundreds of feet above them. The rim of the barrier glittered flashingly. The hogback's silhouette seemed to stir and move strangely, evanescent and flickering, like the shifting of the Borealis.

"Funny," Powell said.

"Look closer!" Owen commanded.

The rising slope was not bare. Great plants grew on it, hundreds of bizarre forms. About each growth a nimbus of fog hung.

The things were perhaps sixty feet tall, built like coral growths, with a single upright stem as thick as a man's body, from which dozens of straight, rigid branches grew out.

Down on a wind came glittering star-specks. They fell on bare, grayish, sun-baked ground. And suddenly, they jumped to full size.

With supernal brilliance, bright crystals rose and budded and reached up, gleaming in all colors of the rainbow. Polyhedrons, triangles, quadrilaterals, all shining geometrical figures sprang

up from the earth and in a moment formed an irregular dome forty feet high.

From the nearest white plants, fog came drifting, reached out to the crystals, caressed them.

The fog closed in and was gone. Wind caught it and reft it apart in tatters. The glaring sunlight evaporated what was left.

Where the crystals had been was nothing.

"Life, Powell!" Owen said very softly. "Silicate life! And even here, Nature's ever present check and balance system."

The cameraman blinked. "The crystals are alive?"

"Yes. A life based on silicon, as ours is based on carbon. We can duplicate both in our Earthly laboratories. But here it is no laboratory experiment. Carbon life and silicate life are fighting for existence."

Owen pointed to the nearest plant.

"Its roots must go very deep, for the intense sunlight would dry out all water near the surface. And the roots do go down to water. They must. For the plant emits water vapor to protect itself from the sun's rays. The white skin reflects light, too, and that naturally helps.

"Apparently the crystals and the plants grow in entirely different environments. The former grow faster, but the plants can destroy them. Moisture is fatal to this silicate life.

"On the crest there," Owen nodded indicatively, "there seem to be no plants. The crystals grow unchecked, reproducing, sending out their spores to drift into the valleys where the plants destroy them.

"Powell," the scientist's gaze locked with his companion's, "if intelligent beings live on the surface of this world, they must be alien beyond human imagination!"

"So what?" Mike said belligerently. "We're armed."

Owen smiled sardonically. Without a word he pulled down a lever.

"I've checked the air," he said. "It's breathable."

The door slid back, opening the path into the Unknown.

CHAPTER XVII

Into the Tunnel

CLAD in their lightweight armor, loaded haversacks on their backs, the two stepped out on solid ground.

Diaphragms in the transparent cowls brought to their ears a thin, distant crackling. Powell, locating it, pointed up to the ridge. Owen nodded.

"Yes. They grow rather noisily. But the plants—" He stumped to the nearest, a dwarfed figure at the foot of a stem that towered ten times his height, and thumped the bole with his fist. "It's quite hard. Grows slowly. No leaf-surface, of course. I wonder what the principle of respiration is."

"Don't ask me," Powell said, staring around under his shading hand. "We're in a valley here. A basin. And there's nothing but the plants and the crystals. Which way?"

"It doesn't matter," the other decided, shrugging. "This way, I guess."

He chose a direction at random and plodded forward.

Even through the suits the sun's rays burned hotly. They came into the fog aura of a white plant, and immediately the uncomfortable warmth was gone. The high percentage of water vapor made the vicinity of the plant an oasis.

Keeping in the shadows of the huge growths, they approached the crest of the rise. Here the ground was unbroken, save by increasingly large clusters of the scintillant silicate life. Owen hesitated.

"I wonder if these are dangerous," he murmured, and planted one foot hard on a mound of crystals. Coolly he waited, while Powell snatched out his heat-gun and held it ready.

The crystals were shattered under Owen's foot. All around it they grew and budded unrestrainedly, but they did not attack the surface of the suit. Owen nodded with satisfaction.

"They need some element in the soil. Good. We're safe enough."

He moved on. Powell, sighing deeply, sheathed his weapon and began to film the surroundings. It was not long

before they came to the top of the rise.

There the silicate, unhampered by moisture and encouraged by the direct beams of the sun, grew gigantically. The structures towered above the men like glaciers. Yet they were friable, and crumbled easily. When one tower toppled upon Powell, he yelped and tried to scramble out of the way, certain that he'd be crushed. But as the crystals hit him they degenerated into crystalline dust and drifted away on the wind.

They rounded a towering, dazzling monolith and saw before them the new world, but not much of it. Other crests lay beyond, valleys hidden by shimmering ridges, a landscape far-stretching and monotonous—with one exception.

A few miles away was a plateau, a squared-topped mountain. It was a cube so incredibly high that Powell had to bend back his neck to see the top of it. Pure white, featureless at the distance, the thing rested beyond the crests, gigantic, monstrous!

For it was no mountain, Powell knew. It was the laboratory of the Colossi!

DESPITE the shadows in the sky above New York, despite the telescopic pictures, until now Powell had not fully realized the stupendous hugeness of the giants. This vast structure lifting, silently menacing, against the pallid blue sky, brought home, as nothing else could, the almost inconceivable size of the beings that menaced New York.

Inconceivable? Only to one who had never looked through a microscope, to one who had never seen an ant. As a human would seem to an ant, so the Colossi would seem to a man.

Even on Earth there was a limited, though vast, variation in size.

But in the face of this silent, cosmic-size fortress, logic and sanity failed.

An overwhelming sense of insignificance and weakness struck through Powell. He growled inarticulately, swung up his camera, and began to film the structure. It was his only defense against superiority. Without realizing it, he had classified the white fortress, despite its overpowering size, as a "take." And "takes," you see, were nothing new to Mike Powell, Summit's ace cameraman.

"If we had binoculars," Owen said, "we could see the window by which we emerged. Is it worth going back to the ship for them?"

Powell unearthed a telescopic lens.

"Use this," he suggested.

"Good! Yes . . . We can find our way back. But right now—"

"What?"

Owen's face, in its transparent covering, was shining with perspiration. He licked his lips and sighed.

"I was not meant for forced marches. But come. That's our destination."

They started down into the valley. It was identical with the one they had left. Fog plants and crystals alone were there. The next valley was the same. One after another merged into a hazy memory. Often the men paused to drink.

Wearily the two went on. Hope waned. Had Eberle been mistaken in declaring that a race of telepaths dwelt on this world? If so, Powell decided, they were invisible.

The thought made him pause. He remembered some of the thought-messages from outside the huge laboratory. Visions of digging in tunnels, Mrs. Cardotti had mumbled.

Of course the aliens were invisible. They were underground!

He communicated the idea to Owen, who nodded eagerly.

"Yes, that checks. The rays of this sun would probably be dangerous to intelligent beings. But solid earth can stop even cosmic rays. Under the surface, that's where we must look."

"How?" Powell's voice was heavy with irony.

"Oh, use your eyes. There must be outlets for ventilation, if the creatures have respiratory systems. Disguised outlets, perhaps, if they are at war with the giants. The crystals are too impermanent. But the white plants—"

IT was a long time before they found what they were searching for. The absence of a fog veil around one of the plants was betraying. The branches were perforated with innumerable

holes. The plant was merely a hollow shell, sucking in air audibly.

"Listen," Owen said. "Hear that?"

Mike pressed his ear close to the plant. Through the diaphragm he heard a faint, muffled pounding.

"Pumps?"

"Perhaps. But how can we enter?"

Owen stared around vaguely. He grunted defeatedly and took a swig of the diminishing water supply. Powell emulated him.

"Footprints?" the cameraman suggested, wiping his mouth and hastily donning his hood.

"On this baked ground? Hardly." Owen wore a baffled look. "We'll just have to search."

The great sun had covered a perceptible arc of the pallid sky before the entrance was discovered. Peering down through a crystalline growth, Powell had noticed an irregular blob of darkness that did not seem to be merely rock. He kicked the silicate to pieces and found a lever of metal protruding from a slot in the baked ground.

Hastily he called Owen. The scientist came lumbering forward.

"Found something?"

"Shall I pull it?" Powell asked.

"Well, you can't eat it. Naturally!"

The cameraman tugged the lever forward. The ground suddenly burst open at his feet in a ten foot gap, and out of the opening squirmed a thing that resembled a torpedo crossed with an octopus. Its body was like an elongated barrel, pointed at both ends, and all around it grew thick palps, elastic and covered with suckerlike mouths.

Powell's heart seemed to lift him with it four feet back. His hand came up with the gun. Owen, too, was shaken.

"Wait!" he called sharply. "Don't shoot it yet!"

Powell's finger was already on the trigger. He hesitated.

The creature rolled aside. It was eight feet thick and three times as long. Its tentacles propelled it to one side, where it lay without motion.

"Is *this* what we're looking for?" Powel asked, nauseated.

Owen peered into the depths of the hole.

"This is a tunnel," he said. "See?"

Stretching down into the earth at a steep slant was a passage, cut out of solid rock, illuminated by glowing filaments on the floor.

"You thinking of going down there?" Powell inquired, his eyes on the monster.

"It's what we were looking for, isn't it?"

Owen stepped forward calmly and began to descend. Powell followed because there was nothing else to do.

THIRTY feet along the tunnel they paused as a thumping came from behind them. "Look," Powell said. "We're locked in."

The torpedo-monster had rolled back and crawled inside the tunnel, blocking it with its bulk. The tentacles moved swiftly. Moisture extruded from the suckers. Unhurriedly, mechanically, the creature began to close the entrance to the passage, its secretions moistening the walls so that the tentacles could scrape off gluey-looking mud, which it plastered along the sides of the tunnel mouth.

"That," said Owen, "is the doorkeeper. I have a hunch we can get out whenever we want. If not—well, we're armed. Anyway, our road leads forward just now."

Powell examined the thin threads that lay along the ground. They extended down the tunnel and stretched out of sight. Smaller than twine, they gave out a pale, white light that was of about the strength of a 30 watt electric bulb. Gingerly, Powell stirred one with his toe.

The filament writhed aside. When Powell drew back, the glowing thread swung back in place.

"It's alive," Owen said. "Come along."

They went warily on. The corridor ran straight ahead at the same pitch, and for two hundred yards there was no change. Then a gust of wind stirred Powell's cheek.

He strained his eyes. Some distance ahead a gross bulk lay against the wall. As the two approached, it became distinct, a fat, bulging object that nearly filled the tunnel, and which expanded

and contracted rhythmically. It was a spheroid, pallid and colorless, with a skin of tough, tensile muscle. The wind became a series of swirling gusts.

"Look at that," Owen said thoughtfully. "It's an air-pump, and it's alive. See? Its body blocks a ventilator shaft, perhaps the very one we found. See those valves on its body? It sucks in air from the outside and releases it in this tunnel."

"Alive!"

"Like the doorkeeper. Do you understand the significance of this, Powell? A race without machines—a race that has adapted itself incredibly! Lord knows what we may discover. We are on the outskirts of the unknown, the mere fringes. When we penetrate further in. . . ."

The muffled throbbing of the living pump beat all around them, rhythmic, strange, and somehow ominous.

CHAPTER XVII

The Recessive

ON the two men went, finding nothing but more of the pump-creatures set at irregular intervals in side passages. The air was quite breathable. Before long, Powell took off his protective suit. Owen followed his companion's example. Cooled and relieved, they continued their journey.

It was, perhaps, an hour later when the corridor opened into a larger one at right angles to the first. The illuminating tendrils lay along its floor. It was vacant, but, as the two men hesitated warily, they heard a padding of footsteps coming from the right, down the slope.

The sounds grew louder. Powell drew Owen back into the passage mouth. Into sight came two of the strangest creatures human eyes had ever seen.

They were quadrupeds, their white, pulpy backs some five feet above the ground, and they progressed swiftly and mechanically on thin, triple-jointed legs. Aside from these similarities, the creatures were utterly different.

The foremost had a round, globular body that looked like a toadstool. Tiny eyes, protected by transparent membrane, stared straight ahead. The face of the thing was all muzzle. It seemed as though someone had clapped a funnel on the beast's face. Under the proboscis was a tiny mouth. The ears were pointed and set far back. There was no tail.

The other creature resembled, somewhat, a sloth. Its forelegs were tremendously developed, ending in great clawed scoops on which it rolled forward unsteadily. It seemed to be blind, but followed its companion without hesitation. The face of this one was practically non-existent, just a button of a nose and a round hole of a mouth.

They plodded forward without noticing the onlookers. As they vanished, Powell drew a deep breath and stared at Owen.

"Well?" he inquired. "What are they?"

The scientist shook his head. "I don't know. Mammals, of course, and highly specialized ones. The one with the clawed feet was built for digging. The other? I don't know, I'm sure."

"Do we follow them? They looked dangerous to me."

But this problem was solved immediately. From the direction in which the strange beasts had gone came a hurried padding of footsteps. Again the men drew back.

A balloon on stilts ran along the passage and stopped in front of the side corridor. It was deathly white, with a globular body three feet or so in diameter. It had the legs of a stork, clawed and scaled. It was featureless and headless, save for a tiny orifice on one curve of the sphere.

It stood motionless. Out of its top popped an eye, lifting as though on a periscope. It surveyed the two men.

Powell groped for his gun.

"What now?" he muttered wildly. "It can't be intelligent!"

"Wait," Owen said, and stepped forward, one hand raised, palm forward. "We are friends," the scientist began.

The eye retreated. Out of the sphincter a puff of blue vapor raced. It dissipated and mingled with the air im-

mediately. Powell, gripping his gun, was conscious of an eerie sense of timelessness. His fingers strove to tighten on the cold butt, but moved slowly, slowly.

He saw the figure of Owen, before him, crumple to the ground.

Then Powell, too, lost consciousness completely.

SLOWLY, painfully, the cameraman awoke. His brain felt foggy. Memory eluded him for a time, and then came drifting back in vague wisps. There was a remembrance of being carried along tunnels, the sound of a man screaming, and the flashing and glowing of rainbow fountains of light. . . .

Powell opened his eyes. Forty feet above him he saw a ceiling of rock, illuminated by the omnipresent luminous tendrils. He was lying flat on his back, unbound and distressingly chilly. His cramped muscles ached.

He sat up. Agony raced through constricted veins. The cavern swam into view. It was huge, larger than the Metropolitan, and quite empty, save for a fountain of light that shot up apparently from the bare ground some distance away.

The light was no ray. It poured up like water, shifting, cascading, changing, in sky-purple, pearl-white, sun-yellow, gray soft as smoky twilights. And as it whirled up, it whispered.

Almost beyond the threshold of hearing the low whisper came. Ever changing, pulsating, in a curious threnody of monotones, the sound rustled out, rising and falling, rising again.

Louder it grew, and louder. It was a roaring cataract more furious than Niagara, deafening, yet strangely musical and soothing. The light changed. It swirled into patterns.

Fantastic patterns of color, three-dimensional and alien. Cubes and polyhedrons and cones danced before Powell's eyes.

The light faded; the sound died. The rainbow fountain dipped and sank and was gone.

Where it had been was a small transparent hemisphere set in the floor.

From where he crouched, Powell could not see what lay beneath it. Painfully he rose and stumbled forward, till he stood above the pane.

It was of glass, or some allied substance. Beneath it was a core of light. A spheroid of soft brilliance, white and intense, glowed there, revolving slowly, no larger than Powell's head, oddly beautiful—and alive.

The sheer magnetism of the thing thrust out like a spear. Involuntarily, Powell moved back a step, apprehensive and uncertain.

In his mind, a soundless voice took form.

"Are you an intelligent being, like the other?"

TELEPATHY, that was obvious enough. Eberle had said telepaths existed on this outside world. Yet, faced with the actual phenomenon, Powell felt at a loss. He tried to frame words in his mind.

"Speak aloud," the voice said. "It is too confused if you do not."

"Where's my companion, the man who came with me?" Mike asked.

"Man? The man you think of as Owen? I see. He was analyzed."

The cameraman gulped. "You mean, he's dead?"

"Well," said the voice candidly, "he stopped moving after a while, when his digestive organs were taken out. He is spoiled, I believe."

Powell began to sweat. He had never felt any liking for Owen. Still, the scientist had been a human being. Cold-blooded dissection of a man is always horrible to another man.

"Was that necessary?" he asked unsteadily.

"Personally, I doubt it," said the voice. "But of course I'm not in charge. I'm recessive, you see. I have emotions. The dominant part of me works on pure logic."

"Mind if I sit down?" Powell said. He had to. His legs were far from steady. All this seemed like a nightmare.

"You shouldn't be afraid of me," said the voice. "I'm probably a friend of yours. You have a most unusual shape. What good is it?"

"Good?" Powell glanced down at himself. "Why, I don't—"

"You're not specialized. Imagine a world where everybody is alike and yet everyone performs different tasks. Can you dig a hole with those tiny claws?"

"I'd use a shovel," the cameraman said automatically.

"A machine? I don't get the thought —A lever. We do it differently. Move back a bit and I'll show you."

Powell obeyed. The fountain of flame gushed up again. This time it was pure white. On its surface a picture of two beasts grew.

"Watch," said the soundless voice.

From the tubular snout of the foremost creature, a jet of yellowish liquid spurted. It splashed on the surface of the rock and appeared to seep in. A thin steam arose.

The shovel-pawed being lumbered forward and began to dig. In a few moments he had excavated a large hole in the rock.

The picture faded; the flame died. Only the glowing crystal hemisphere was left. Powell stared at it.

Grimly he strove to rationalize his thoughts. It was difficult; one can't argue with emotions. But the face of Eberle, calm, intent, questioning, swam into view steadingly. Powell clung to that mental picture. His hand went to the camera at his belt, and he glanced again at the shining disk.

NIGHTMARE, hell! It was a shot, something to be filmed. Powell touched the stud that started the wire film unwinding.

When he spoke again, his voice was steady.

"You can read my mind, can't you?"

"Of course. I have no organs of sense as you have. I'm not a brain, as you seem to be wondering. I have evolved beyond that. I am an intelligent atomic structure of pure force."

"Are there others like you?"

"No. I think for the others. Or, rather, my dominant does."

"I don't get it," Powell said. "You keep talking about dominants."

"I'll explain, if I can," the voice interrupted. "I think I've read enough from your mind to make myself clear. You have two selves, haven't you? You have names for them, conscious and subconscious, mental and emotional.

"In this world, evolution proceeded by specialization rather than by environment, as in yours. There is an element here that affects living beings differently. Inherited characteristics are part of the plasmic pattern.

"After birth, as you term it—and it seems to be a most ridiculous proceeding—an individual's potentialities are shaped, in your world, by his environment. Here it is different. The strongest potential characteristic is developed *in* the plasm, before individual life is required. We have breeders, like your—what?—t e r m i t e s, yes. Queen-mothers.

"This development took place, naturally, over a long period of years. The necessity for a single, central, directing intelligence became evident. Eventually this brain evolved from living tissue to pure energy. This great brain became two separate, yet allied, identities.

"The same life force activated them both. Logic and emotion had to be kept separated, by the laws of ultimate evolution. And the logical portion had to be dominant. This dominant, logical intelligence rules and administers our civilization. It is the other half of myself. I, the recessive factor, am a being of emotional reactions alone.

"Personally, I rather like you," the voice continued. "But, as I say, I have no power at all. My dominant thought it necessary for your companion to be analyzed. I desired to see you. Since there was no immediate use for you, I had my will.

"Should the dominant decide to analyze you, I shall be disappointed. Very! But there'll be nothing I can do about it."

CHAPTER XIX

Escape Into a Trap

POWELL staggered back. His throat felt dry and impossibly tight.

"Don't you know what the—the dom-

inant intends? Isn't it you?"

"Does your subconscious know what your conscious intends, or the other way around? It will depend on developments. Your brain has been searched. We know all about your world, and the experiment of the beings you call the Colossi. I may say that you're quite right. The Colossi have tried every weapon they possess on us, and have failed to destroy us. They dare not loose their ray of potentiality on us until they have tested it thoroughly. You see, this was the ray that was responsible for our evolution."

"It comes from a mineral, you said?"

"Yes, a mineral which is found far under the crust of this planet. It never affected the Colossi, who live on the surface. But originally we were burrowers underground, and came within the radius of the ray. The mineral is scattered all around.

"I doubt if a concentration of it would hurt us. We'd simply develop new potentialities. I don't know what. We might turn into pure energy. Let me see . . . Suppose you found a way of releasing instantaneously all the energy in the mineral you call radium. That's the principle of the Colossi's ray. Only it isn't radium, of course."

"What do you call it?" Powell asked, remembering that Eberle had said that in this substance lay the key to the problem.

"Names are unnecessary for telepaths. I'm getting all these words out of your own mind, you know. Our own race uses no words. The dominant sends out messages telepathically to the people, and they obey."

"Have they any identities of their own?" Powell asked.

"No. The dominant and I are the intelligence; they are the physical factor. They respond to impulses, but, actually, they are a part of us, as your paw is a part of you . . . Sorry. I mean hand."

Powell thought it over. "And you are attacked by the Colossi?"

"Oh, no," said the voice simply. "We're attacking them."

"Why?"

"We want to eat them. Then, too, they would kill us if they could. For centuries we have fought. Now there is only this single group of Colossi left. Eventually we shall break through their barriers and eat them."

"What do you eat, aside from Colossi?" Powell inquired. He felt slightly mad.

"All sorts of things. The diggers eat rock. They convert it into energy, and share part of it with the corrosion-throwers. The latter, in turn, eat the white plants on the surface and share part of that nutriment with other varieties.

"It is interlocking, in a way. Certain types require different foods, supplied by the digestive processes of other types. Like your—what?—yes, aphids. Ant-cows. Or like your own race, eating food so your females can supply it in different form to their young."

THE sphere of light spun silently, almost with a reflective aspect.

"Your race is like the Colossi, in that you depend on machines. We *are* machines, and yet intelligent. We have adapted ourselves perfectly to our environment. Even I, who am purely emotional, am well adapted. I amuse myself by creating color and light and sound. But I am recessive, and that is lucky, or I would probably destroy our race by impractical bungling. The dominant is perfectly adapted to his task."

"What does he look like?" Powell asked.

"He doesn't look like anything. He's invisible. You can't see him, anyway, for he's far down near the core of the planet. He lives on energy from the molten heart of it. He wouldn't have time for you, unless you fitted into his plans."

"Maybe I could help," Powell suggested. "Or others of my race. If we could help you destroy the Colossi—"

"You can't," said the voice. "Your brain was examined, and that of your companion. You have no potential strong enough to aid us. And your machines—well, we don't understand them. Our mind just doesn't work that way. How could it?"

Obviously, it couldn't. Mankind was

built on the principle of the machine, from the first crowbar, a lever, to the most intricate modern dynamos and space ships. But a race that automatically fitted itself to its environment and needs—such a race could no more understand the science of machinery than an Eskimo could understand quanta mechanics.

"You do have a very strong weapon," the voice broke in on Powell's thoughts, "but it's too dangerous to use. You might very well destroy us after you've destroyed the Colossi. There's no use arguing. I've read your mind, and know how your race keeps promises. Personally, I'd take the chance, for I like you. You're diverting, and your mental pattern is most amusing. But I'm not the boss. I'm sorry you won't live long."

"What was that?" Powell shouted.

"The food difficulty. We have no food suitable for you. Some of our race might work out a formula with the necessary proteins and carbohydrates, but the dominant feels it isn't worth it. You're useless to us. Don't feel badly, though," the voice said consolingly. "I like you."

"Thanks," Powell returned bitterly. "That's a big help. So I just stay here and starve, eh?"

"You might go on a tour of our tunnels. But you'd better not. If you got in the way, you'd be destroyed. Still, I can't stop you."

"I'd have a fine chance of getting out," Powell said glumly. "This must be a labyrinth."

"I'd tell you the way out. But you haven't much of a chance, as you say."

Powell gasped and caught at the straw. "You mean, you'd let me go?"

"Oh, yes. I'm emotional, you see. I don't really care whether or not you destroy our race. I get quite bored sometimes, since I'm nearly immortal, and death would be an interesting experience. Then, too, being emotional and illogical, I like you, perhaps because you're so funny. Your mind, I mean, though your form is diverting too.

"I'll tell you the way out, if you want, and you can go. But if the dominant tunes in on my mind and finds out about it, he'll have you destroyed. Shut your eyes."

POWELL obeyed. Instantly, into his brain flooded something strangely like memory, imprinting itself upon his brain cells. In a flash he knew, completely and unmistakably, the route he must follow to reach the outer world.

"Goodbye," said the voice. "You can open your eyes now."

Powell did so. He sprang up, took a few steps toward a black gap in the wall, and then halted, turning. He stared at the glowing hemisphere in the rock.

"Thanks," he said.

"Goodbye. You know where I am in case you decide to destroy me."

The fountain of flame shot up dazzlingly, washing the cavern's walls in pale brilliance. The spire shaped itself into fantastic, intricate arabesques. . . .

Powell smiled uneasily and turned again to the tunnel mouth.

The corridor ran up steeply and was lit by the glowing filaments. Side entrances occurred here and there. Once or twice Powell heard footsteps in the distance, and hid till the creatures had passed.

Once it was a digger, and the next time a conglomeration of extraordinary organs that resembled a surrealist's nightmare. Then Powell came to a passage which he could not but remember. The thought-impulse of the recessive had made certain of that.

He turned left, still bearing upward. A bit farther on, he turned left again. From the distance came a confused stir of movement, sometimes louder, sometimes almost dying away. Powell hurried his steps. What if his escape had been discovered?

He came to a tunnel mouth from which unfamiliar light gleamed. It seemed both short and vacant. For a moment he stood peering in, puzzled by some quality of the light. Then, on an impulse, he entered the corridor.

The light came from the wall at the end. Something was embedded in the rough rock, a crystalline structure, a shining crystal. It reminded Powell of

something. A curious quality in the light—

It reminded him of the glowing hemisphere, on the cavern's floor, the light emanated by the living intelligence that had been evolved by the unknown mineral.

Was this the secret for which Eberle had been searching? Was this the source of the Colossi's ray?

"Lord knows," Powell said under his breath. "But I'm going to find out!" And, unsheathing a knife, he went carefully to work.

TEN minutes later he was on his way again with his precious burden. The radiation, of course, might be dangerous. Powell had no lead containers. He had to take the chance and hurry on.

It was too easy, too good to be true. In half an hour Powell reached the end of a passage blocked by a fat, torpedo-shaped bulk. He paused to don his transparent protective suit and then directed all his will into a silent, mental command.

"Open! *Open!*"

The gross bulk stirred and writhed forward. Bluish-white light burst into the depths of the tunnel. Earth showered outward. The creature rolled out and away, and a jagged circle of milky blue sky loomed ahead.

Hastily, Powell emerged. Whether or not this was the same passage by which he had entered he had no way of knowing. But on the skyline loomed the great block of Colossi's citadel.

The sun was low. Powell glanced around and decided that the ship must lie to the left. He stared in that direction, toward the nearest ridge. Behind him the doorkeeper rolled back into place and began to plaster mud with sinuous tentacles.

The surface seemed unchanged. The fog veils still nimbused the white plants; the crystals still grew fantastically on the crests. Powell mounted the first ridge, descended into the valley, and climbed again. He lost count of time.

On a tall hogback, some impulse made him turn. He had heard no sound, yet a sense of imminent peril struck through him strongly. A mound of crystals that had sprung up behind him blocked his vision. He shattered it with a push.

Across the valley lay the ridge he had just passed. Beyond this, another. And, on the third, topping it, were swift-moving pale figures that shone in the light of the setting sun.

His escape had been discovered!

CHAPTER XX

Specialized Murderers

WHAT manner of beings pursued him he could not tell at this distance. He could not pause to use his telescopic lens. Haste was all that counted now. He whirled, thrust into ruin a crystalline tower, and stumbled frantically down the slope.

Sweat trickled over his cheeks. The suit was unbearably hot, yet he dared not discard it. The rays of the sun were far too dangerous. When he ran through the fog veil of a giant plant he longed to stay there. Cool, refreshing moisture condensed on the suit's surface, but not for long.

Out again he raced, into the sunlight. There was little or no refraction, for some reason, despite the fact that the sun was nearing the horizon. Powell's feet ached from thumping on the rock-hard, oven-hot ground. Even with the dark goggles his eyes burned. Or, the thought struck him suddenly, was the radiation of the strange mineral affecting him?

Mentally, he shrugged. If the rays were deadly, he was already doomed. The necessity now was for reaching the *Manhattan*, which might still be miles away, even in another direction.

He glanced behind. There was no sign of the pursuers. The ridge hid them. Now the ground was mounting again, the white plants giving place to bare earth and then to the huge crystals. But even on the summit Powell could not see his enemies, who were apparently in a valley.

Which valley? How fast could they travel?

Powell wondered if he should discard his equipment. He had already jettisoned the pack, but there were other things that added weight to his load. The camera he would not discard. The mineral? No! Besides, it would take too long to remove his equipment from within the suit.

He ran on, his breath coming fast. His throat hurt. A dull, painful ache knifed through his lungs, from sternum to spine. The agony in his legs he had forgotten long ago. They were machines, pumping doggedly and automatically, carrying him on. . . .

The next valley was in shadow. The sun was on the horizon. Panic gripped him. Had this world a satellite, a moon? How much light would it shed? Certainly he could not locate the *Manhattan* with the aid of his pocket flashlight!

He topped the next rise. Behind him, the pursuers were pouring over the last ridge. They shone curiously in the dying sunlight. They seemed mere carapaces under which short, jointed legs moved swiftly. Like giant beetles, they had mandibles, vicious jaws that gaped alarmingly. Fighting creatures, sent out for destruction!

Powell fled down the slope. Fear tore at him, but he fought it away. There was no time for anything but flight, speed and more speed!

As he mounted the next hill, he saw the monsters dashing down into the valley behind him. There were less than a dozen of the creatures. They spread out in a crescent, trying to hem in their quarry. The horns of the crescent reached out. . . .

The next ridge held a wall of sky-leaping crystals singing in their fantastic growth. Powell lunged through them amid a torrent of cascading brilliance. Reeling, gasping, half blinded, he plunged through, and saw below him the ship.

In the valley at his feet the *Manhattan* lay. But so far distant! Too far!

IT squatted in shadow. Gray twilight filled the valley with silence. The basin was a pool of murky gloom. The sun's rays did not penetrate there.

Hope prodded him. He ran on. And behind him came the vanguard of the monsters.

From sunlight into chill shadow, legs still pumping, he tore at the fastenings of his suit, knowing that the deadly emanations could not reach him here. He ripped the garment apart and flung it away. And then Powell gave a choking, hopeless cry.

The horns of the crescent that pursued closed in. The creatures sped faster than a man could run. They formed a great circle barring Powell from the *Manhattan*.

But they were oddly changed. They were without their carapaces. Glancing behind him, the cameraman saw the pale shields above him on the slope. Without the armor, the beings were much smaller, simply tapering bodies expanding to the mandibled heads. They were little but murderous jaws on legs.

Smaller than Mike, they came on, menacing and deadly. The port of the *Manhattan* was not far distant, but the creatures barred the way to it. Powell jerked out his heat-gun and took careful aim. The blast had no effect on the tough mandibles or the segmented legs. The weapon was useless.

Quite suddenly Powell figured out something. The monsters had worn armor until they descended into the shadowed valley. Why? To protect them from the sun's rays? Then those unfiltered ultra-violet rays must be as deadly to them as they were to humans.

"Oh, Lord," Powell whispered through white lips, and dropped his gun to fumble frantically in his pocket. He ripped out the powerful flashlight, made a hasty adjustment on it, and from another pocket took a case of camera lenses. One of these he selected and held it in place over the flashlight's bulb.

"Ultra-violet lens," he mumbled, "work! Please work!"

The lens, used in filming, had the power of stepping up light vibrations to the ultra-violet. Compared with the sun of this alien world it was feeble indeed, despite the powerful flashlight.

The nearest creature was only ten feet away when Powell shoved the

switch. The invisible rays lanced out. The cameraman swung his improvised weapon back and forth, not sure of his aim.

And the monster halted!

It paused briefly. Its body jerked in convulsive motion. The segmented legs went into erratic action. The creature blundered away, its sensitive neural structure disrupted by the ultraviolet.

But the others were moving forward. Powell swung the flashlight in an arc. Two more monsters dropped, then another. Six were left. The path to the ship was open.

Powell ran toward it. Pounding of unhuman feet on the hard ground warned him. He whirled, swung the weapon again.

If those deadly mandibles once gripped him, he was done for. That was certain.

Two more went down. Four were left.

He gained another few yards before he had to turn again. This time the creatures were wary. They scattered and dodged. It was growing darker, and they were difficult to see in the tricky gloom.

OVERHEAD the sky was purple and starless. No moon showed. Shadows in the dark closed on Powell. The invisible beam lashed out. The monsters fled.

A great bulk loomed up. The ship. Where was the port? Powell put his back against the hull and edged forward. He nailed an attacker as the sharp mandibles tore his trouser cuff.

Under his hand he felt a groove. Near it was the stud that opened the port. Powell's finger pressed the button.

Silently the valve slid aside.

There was an onrush of shadows. Powell flashed his light at random, hearing muffled sounds from the dark. He stumbled back, kicking at a black thing that reached for him. He sprang aside and played the ray on the portal. The sounds grew fainter.

Hastily, he shut the valve and switched on the light. The control room was empty, save for himself.

For a short while, anyhow, Mike was relatively safe. How much time he could spend searching for the drive mechanism, which Owen had boasted was well hidden, depended on the dominant's cleverness. If the mineral-corroders were sent, Mike thought, goodbye space ship!

Carefully, then, and without allowing the pressure of time to panic him, he began at the bow and worked back. Rocket ships have little free space. Their floors are solidly welded, walls are usually of one piece. Short, strong girders take up every bit of space between.

He had been in the hold while Owen was hiding the mechanism, which ruled that out. Somewhere in the barren rooms up forward was that vital machine.

The single clue Mike had was that the instrument was quite small. Thus, it could be almost anywhere. He investigated behind the control panel, where there was a limited pocket in the wires and tubes. Every inch of the walls and floors had been tapped. Lockers, fuse boxes, the stateroom bunks, the galley, washroom, the old fuel hold—he had gone through these twice.

Eberle's space drive wasn't there.

He sat down, deliberately not looking outside to see how much time he had. Keeping everything else submerged in his mind, he asked himself one question.

If he had to hide a compact, portable article, easily detached and reconnected, where would he put it? From wall to wall, remember, rocket ships have nothing but necessary furniture, bolted for security. Sliding panels are not customary. With the exception of the few places he had already examined twice, everything could be seen at a glance.

"Oh, you dope!" he suddenly yelled at himself. "This isn't a rocket ship! Owen hid the machinery in the sealed tubes, of course!"

And that, naturally, was where Owen had concealed it. A brief search discovered the boxlike instrument in a bow tube. Quickly, Powell bore it to the panel, attached the wires, plumped

into the snug, cushioned pilot's seat.

He pressed a button, gently moved a metal bar. The *Manhattan* lifted.

It rose up silently, till it hung a hundred feet above the valley floor. Silhouetted against the last red sunset glow was the fortress of the Colossi.

Mike sent the ship driving toward it.

WITHIN an hour the *Manhattan* was dropping toward the city for which it had been named. Emerging, Mike found himself surrounded by a dozen mechanics, superintended by Eberle. The scientist's rubicund face was contorted with amazement.

"Powell! Good Lord! What's happened? Why did you run off like that?"

"I—" The cameraman swallowed desperately. "I want a drink. Bad!"

"Come along!" Eberle guided the other toward the elevator. "I was outfitting another ship to go after you.'

The elevator stopped. Eberle urged the cameraman out.

"Here's what you want, I think," Mike said. He took a chunk of ore from his pocket and put the radiant mineral on the table. Eberle's jaw dropped.

"The source of the ray?"

Powell nodded.

Eberle picked up an electroscope and placed it near the radiant rock. The gold leaf remained unwilted. Frowning, the scientist filled a test tube with colorless liquid and spilled a drop on the shining surface. Nothing happened.

"You've done it!" Eberle shouted. "You've turned the trick. I'm sure of that. It'll be simply a matter of finding out how to release the energy in this mineral, and I already have telescopic photos of the Colossi's ray machine."

"I don't see how that'll help," Mike objected.

"No? To release all the energy at once, to turn the full power of the ray on a human being—on myself? If the mere touch of the ray turned me into a super-scientist, imagine what its complete strength would do!

"I believe this is the weapon, Powell. I shall turn the power of the ray on myself—the full power—and see what effect it has.

"My scientific potentialities will be so far advanced that I can, I believe, defeat the Colossi and save New York!"

He picked up the mineral, and fled. The cameraman sighed. Events were moving too swiftly. But it felt good to be back in New York, even though on another planet and in another continuum.

Powell drank more whiskey, called a messenger, and sent the films to Summit for development. He was finishing the bottle when the door opened and a man in baggy tweeds walked in stiffly. Glacial blue eyes in a sunburnt face scrutinized Powell.

It was Somerset, the IIB agent.

"So here you are," he said shortly. "Gwynn told me you were back. Got anything?"

"I think so." Powell nodded. "I'd offer you a drink, but there's none left. Yes, I found what I went after."

"Good. There've been more monsters appearing, you know. New York can't hold up much longer. What's the dope?"

Powell explained in detail. Finally, Somerset, lighting his pipe, stood up.

"I'd better see Eberle. You've done a fine job, but it's up to him now. If the IIB can help—"

The cameraman wasn't listening. His eyes were intent on an instrument on the table. An instrument that told him something almost unbelievable. Powell's hand, at his side, moved swiftly. It held a lancet he had picked up from the table. He drove it deep into Somerset's leg.

The man ignored the powerful stab.

CHAPTER XXI

Come to Death!

SOMETHING in Powell's face warned Somerset. The agent glanced down, saw the lancet, and sprang back. Powell lunged at him.

Somerset's arm lifted. A beam of pale light lashed out. It gripped Powell and held him motionless. The cameraman stood silent, straining every muscle against the paralysis ray.

The portable ray was not powerful

enough to prohibit speech. When Powell's mouth opened, Somerset glanced at the door and hastily reached out a hand to click the latch.

"The room's soundproof," he said. "Nobody can hear you yell."

Powell thought fast. Eberle might return at any moment. If he found the door locked, he would become suspicious and investigate. If he could keep Somerset here till then—

"So you're the super-criminal, the robot crime-master!" Powell said with difficulty.

"How much do you know?" Somerset said coldly. His glacial eyes were unrevealing.

"I know plenty. I know you're the First, and I know the reason why you walk stiffly. Artificial legs! Nobody with legs could fit inside the body of the robot, but there was plenty of room for a legless man. Remote control, hell! You were inside the robot, directing it personally."

"Go on," the other commanded, glancing at the door.

"Tell me if I'm wrong," Powell said, trying to smile. "I'm just piecing things together as I go along. They fit, now. For one thing, you're not Joe Somerset."

"No? Who am I?"

"The Spacehawk. Max Owen, your stooge, told me your behavior pattern checked with that of the Spacehawk. And Somerset was no crook. He went off to capture you and came back two weeks later alone. He caught you, but he didn't kill you. There must have been a fight, because you look exactly like Somerset, and you're wearing artificial legs. How does that work out?"

The Spacehawk lifted cynical eyebrows.

"There was a battle in space, Powell. There wasn't much left of my body, and Somerset's legs were burned off with a beam. But my crew won. I knew I was dying. I had an expert surgeon with me. He transferred my brain to Somerset's skull, got me artificial legs, and I killed him, with the rest of my crew. Then I came back to New York to take Somerset's place."

"Smart of you," Powell grunted. "Nobody would suspect Somerset of crookedness. You must have gotten a touch of the ray, enough to develop your criminal and scientific potential, and built up your underworld organization in a hurry. What were you chasing after?"

"Power," the Spacehawk said quietly. "I was tired of being a hunted criminal. Eventually I would become too powerful for the law forces." He smiled coldly. "I didn't want to conquer the planets, Powell. I didn't want to rule the worlds. That would be a very boring task. But the only escape from my enemies was by becoming stronger than they. When did you guess my identity?"

"Just now. It *was* a guess, but it isn't now. There was an atom-smasher in your underground laboratory. You must have used it a lot. Didn't you know that people who work around those things start emitting radiation themselves?"

THE Spacehawk's eyes changed. He glanced at the electroscope on the table.

"Yeah," Powell said. "The gold leaf wilted when you came into the room. Your own science gave you away."

"Well, you've convinced me of one thing. No one but you knows my real identity. Youre right, but your deduction won't help you now, I'm afraid."

"What are you going to do?"

"Eberle will become more powerful than I, if he turns the potential ray on himself. I will be the subject of that experiment. It's simply a matter of self-protection. A gamble, of course, but I am a gambler. If I win, I shall destroy the Colossi and return New York to Earth, if possible. Once that is done, I need fear nothing."

Powell's heart turned to ice.

"You're crazy!" he whispered. "The ray might work on Eberle. He's a scientist. But how do you know what potential it'd develop in you? And how could you kill the Colossi?"

"That," said the Spacehawk, "I shall soon learn."

He moved his arm slightly. The ray flashed out blindingly. Powell went down into the black pit of unconsciousness.

LOOKING up at anxious green eyes, Mike's pupils widened. Sue Clark was bending over him, her red hair tousled, her face pale. She was flipping water on the cameraman's brow.

"Let him smell some whiskey," said the sardonic voice of Lynn Plumb. "That'll bring him around."

Groaning, Powell sat up. He was still in the laboratory. The wrecked door told him what had happened.

"Tapped our wires again, eh?" he said weakly.

"Lucky for you we did," Sue snapped. "We come up to horn in on your story and what do we find? A locked door, and Eberle knocked out in his lab."

"Eberle—knocked out?" Painfully, Mike got to his feet. "What's happened?"

"Plenty! A new monster, Lord knows *what* it is or where it came from! A shining globe of green gas, it looked like. It's killed dozens already."

Horror sprang into Powell's eyes. He guessed what the "globe of green gas" might be. He turned to the wrecked door.

"Come on," he said swiftly. "Got to find Eberle."

Together the three ran down the corridor and burst into the scientist's lab. Eberle was stirring weakly, his rubicund face twisted in pain, his eyes vacantly staring. The light of intelligence came into them.

"Powell," he muttered. "Help me up. What happened?"

"Where's Somerset?"

"Somerset? Was that— He tried to ray me. We fought, and that's all I know."

"What about the projector?" Powell said.

Eberle turned to a series of lenses fitted together in an apparently haphazard manner. Wires dangled from a rheostat within the device.

"I hadn't finished it— Wait! It's finished now! After Somerset knocked me out, he must have completed the machine. And used it! The mineral is gone!"

"Sue, tell Eberle about that green gas," Powell commanded quietly.

As he listened, the scientist's beefy face paled horrified, incredulous.

"He used the ray on himself, obviously. His life-potentialities were developed immediately. He became inhuman, tremendously evolved. But why should Somerset do this?"

"He isn't Somerset," Powell said. "He's the Spacehawk." Swiftly he explained to the others what had happened.

Eberle nodded. "He intends to destroy the Colossi, and then return New York to Earth, eh? Perhaps he can accomplish that. He is no longer limited by the laws of matter which bind our own bodies. He is pure energy, an intelligence of energy. Very likely he can kill by thought alone. Yes, he can destroy the Colossi. . . ."

"It was half an hour ago when we got the last reports of the creature," Sue said. "After that it vanished."

Quite suddenly a violent, ear-splitting roar filled the room. Before the four had a chance to move it faded, changing to a monotonous hum, high-pitched and piercing.

Lynn Plumb swept out his hand toward the televisor.

"That's doing it. What is it?"

THE vision screen flamed into green fire. Flickering, pulsating flames swept across the surface. The humming deepened in tone. It shaped itself into understandable words.

Oddly mechanical, perfectly articulated, a voice enunciated.

"I speak to New York. I am tuned in on every televisor. Listen!"

The green flames flared up brighter. The voice rose.

"I, who was the Spacehawk, am now in other form, an unconquerable form! I have destroyed the Colossi! With the power of my will I have killed them, and with that same power I can return New York to Earth.

"But first three men must die, because they know too much and may be dangerous—Eberle, Powell, Stackpole. In half an hour they must be at Times Square. Otherwise I shall seek them out myself! And if I do that, others will die besides these three."

The voice was still; the televisor screen went blank. Powell raised his

quizzical, trusting glance to Eberle.

"We're elected, I guess," he said grimly. "With Stackpole, the IIB chief."

"You're not going!" Sue said.

"Of course we are not going," Eberle growled. "We have half an hour. In that time—" His face hardened. "We may have a chance of defeating this creature that was the Spacehawk. I don't know how. Powell, are you game to go with me into the outer world and try to find some more of the luminous mineral?"

"Why?" the cameraman asked. "What good will that do?"

"So I can use it on myself. As a human, I cannot battle this creature. But if the ray transforms me into a being as strong or stronger, I can fight it with its own weapons. Of course, we can't make the trip in half an hour—"

POWELL reached in his pocket and pulled out something that shone faintly.

"Is that what you need?"

Eberle almost collapsed under stress of the emotions that tore at him.

"It—it—you've got it! Where? How?"

"I took a couple of chunks of the mineral," the cameraman explained. "It was just as easy to pry out two pieces as one. You seemed to want only one, so I thought I'd save the other for some close-up newsreel shots."

Eberle tore the rock out of Powell's hands. Ignoring the others, he fled to his machine and began to work swiftly.

"Half an hour," he muttered. "Very little time! The mineral must be prepared before I can produce the ray . . ."

"How much time do you need?" Powell said thoughtfully.

"Perhaps I can do it in half an hour. I don't know. I'll try!"

"Uh-huh," Powell nodded, then turned to the door. Sue and Plumb trailed him out.

"What's up?" the girl asked. "Where are you going?"

"Times Square."

"What?" She caught his arm. "You can't do that!"

Powell pulled away free and headed at a fast run for the elevator.

"No? Listen, stupid. Suppose nobody shows up at Times Square in half an hour? What do you suppose the Spacehawk'll do then? Come after us? Sure! And he knows just where Eberle's lab is."

They were in the elevator now, flying up to the roofport.

"But suppose you keep your appointment?" Plumb said. "How'll that help? You'll just be killed, and this—this thing will come after Eberle anyway."

"I may be killed," Powell smiled grimly, "but not before I give the Spacehawk a run for his money. I'm taking the *Manhattan,* with Eberle's space drive. And if I can't outfly a hunk of green gas, I'll deserve all I get."

But Powell was by no means as confident as his words indicated. He knew he was battling something more than a "hunk of green gas." He faced an enemy with powers inhuman, titanic. A being that had slain the Colossi by the concentrated strength of thought alone! A space ship was feeble protection indeed against such a pursuer.

Eberle needed all the time he could get. That was the point.

Mike opened the port of the *Manhattan* and turned to nod at Sue and Plumb.

"See you later," he said with an excellent imitation of unconcern.

"We're coming along," the girl said firmly.

"That's what you think," Powell chuckled, and slammed the valve. He turned to the controls and lifted the ship from its cradle.

A hundred feet up he went. New York lay below. Times Square, where was it? Powell manipulated the controls. The *Manhattan* slid smoothly forward through the air.

A cold chill prickled the hairs at the nape of his neck. Was the Spacehawk, in his new form, watching him even now? It seemed quite possible.

The city moved below. Powell's gaze lingered on the familiar buildings and canyons of deserted streets that had once teemed with roaring life. Soon New York would be back on Earth, unless the Spacehawk overestimated his powers. But with it would

come a creature of incredible potentiality—a being of pure force, a bodiless intelligence born from the mind of a criminal. What would that mean?

Mike couldn't conceive it. But he realized that it would mean the end of the civilization he had known. A familiar phrase came into his mind. . . .

"All over Europe the lights are going out. They will not be lit again in our lifetime."

All over the world the lights might soon be going out, the light of progress and civilization, snuffed by a fiercer alien flame, the green fire of the Unknown!

Times Square lay below. It had been roped off, Powell saw, and armed guardsmen were massed on the curbs. A single figure stood in the center of the street, Stackpole, the IIB chief.

Powell lowered the ship to the pavement, deftly maneuvering it between the skyscrapers. A rocket ship could not have made that landing, but the *Manhattan* grounded with scarcely a jar. Powell adjusted the controls so that a touch would send the craft shooting up vertically, and opened the port. He stepped out to face the slim, dapper, white-haired Stackpole.

The IIB chief's face was set in harsh lines. His gaze probed beyond Powell into the interior of the ship.

"Who's with you?" he asked.

"Nobody. I came alone. How much time have we?"

"Twenty minutes."

"That's time enough," Powell said crisply, "if I talk fast. Here's the setup."

CHAPTER XXII

Battle in the Void

STACKPOLE had made such hasty preparations as he could. Armed forces guarded him. Whether or not their weapons would avail against the force-being, it was impossible to predict.

At the deadline, Powell stood ready at the controls. The port was open. Beyond it was Stackpole, nerves keyed to wire tension. The street was utterly silent. Cleared of the few pedestrians who walked in New York during these dangerous days, it was filled only by the ship and the waiting guardsmen.

The gray light filtered down, unchanging and cool. Not for almost an hour had any of the vast shadows been seen in the sky. Mike could not escape the conviction that the Colossi had been killed.

His fingers jerked nervously as they hovered over the switchboard. Where was Eberle? Would the scientist complete his preparations in time?

And, even if he did, would he succeed?

"Ready," Stackpole said softly.

Powell glanced at the vision plate. Framed high above, against the ribbon of gray sky, a vaguely green tint was beginning to grow.

It faded. The stillness filled the street almost suffocatingly.

Stackpole remained perfectly motionless.

Then, beyond him, Powell saw a green flame spring out of empty air. A whirling vortex of emerald light blazed up, twenty feet tall, shaped like a shell. The shape shifted and changed as Powell watched.

Stackpole sprang back from the port. A tendril of light leaped out, caught him. It wrapped itself about Stackpole and snatched him. The fires roared up. Swiftly they faded.

Where Stackpole had been was nothing!

And from the terror a tendril sprang toward the open port where Mike crouched.

There was no time to close the valve. His finger smashed down on the keyboard; the ship flashed up. The acceleration drove Powell to his knees.

The *Manhattan* halted. It hung motionless in mid-air. The space drive motor ground and screamed under the strain.

It was caught by the green flame, caught and trapped.

Power battled power. Mechanical resource proved the weaker. Slowly, inexorably, the ship began to sink back.

From below came a rattle of gunfire. On the vision screen Powell saw the

militia running forward, firing as they ran.

Above them the emerald fire rose silently toward the motionless ship.

Powell glanced hopelessly around the control room. He knew there was nothing there to aid him. He turned to the switchboard and began to work over it desperately. The motor yelled protest.

Then, suddenly, a ship shot into the vision plate's range. The face of Sue Clark appeared, green eyes blazing. Behind her was Lynn Plumb, hands dancing over the rocket controls.

"Give 'em hell, Sue!" Plumb yelped.

SUE moved swiftly. From the gun ports red jets blossomed. Raving beams of heat tore into the core of the green flame.

The *Manhattan* ripped free of its fetters. The great ship shot up like a bullet. Before Powell could move, New York was a speck far below.

In the vision plate the green fire grew again. And in its wake, swiftly growing in size, came two ships, their heat beams roaring out at the terror. Powell caught a flashing glimpse of the bushy, hirsute face of Hector busy at his controls.

"Just in time, huh, boss?" the Martian shrilled, giggling. "Hold with everything!"

Powell hesitated in indecision. His strongest impulse was to turn and help his allies. But every second counted, with Eberle toiling in his laboratory every second of time he could squeeze out. Mike swerved his ship.

The green shell of flame raced in pursuit. The rocket ships, maneuvering clumsily, lost their quarry for a moment, and then recaptured it. Again the heat beams thundered from the hulls.

The emerald shell paused and drove down at Hector's ship. It smashed through the incandescent rays and met the vessel head on.

The ship's rocket jets went dead. It nosed down in a long, suicidal dive.

Sue's beams were still on; she dived at her quarry. Again the terror rose to meet its enemy.

And again a ship fell.

Unharmed, the green flame of life-energy hung for a moment in the gray void, and then flashed toward Powell.

He risked a glance below. Parachutes were blossoming from the two ships. Sue, Plumb, and Hector were bailing out. By spilling their chutes, they might make safe landings.

Nodding, Powell stabbed at the controls. But his hesitation had been fatal. The *Manhattan* did not move.

The motor's whine rose to a shriek. The green light filled the vision plate.

Through the open port, a tendril of emerald brilliance came exploring. It found Powell, coiled about him. A touch colder than ice froze every atom of his being. The frightful unspeakable horror of the utterly alien paralyzed his mind. The tentacle began to draw Powell out of the ship.

Mike could not move. He could not even breathe. His body was ice, his brain frozen. A dark curtain dropped, smothering consciousness.

This was the end, he knew dimly.

And then, gradually, he became conscious of the binding tendril's withdrawal. Gradually, life flooded back into his body. He lay with his head extended over the port's threshhold, nothing below him for miles but the foggy grayness.

In this grayness were *two* flames, two cores of incandescent green brilliance that battled!

Blinding rays shot out and met in mid-air. The fireshells whirled, faster and faster, elongating to spindle-shapes.

They drew together, coalesced, indistinguishable entities that had been the Spacehawk and Eberle.

Mike lay supine, too weak to move, gaping helplessly at the cosmic struggle before his eyes.

The fires roared up deafeningly. Riven air thundered through the sky. Titans of energy raged unchecked.

Still the mighty two battled. The green flame spun ominously. It was a blaze of supernal brilliance, power beyond all human concept! Mighty power of life itself, of sheer energy, was flaming viciously in vast conflict.

Abruptly the fires died. They lost their screaming intensity and lessened

to a dim green glow. The fury of battle faded. It was gone. The green flame hung, quiescent, unmoving.

Then, slowly at first, but with ever-gathering speed, it rose until it hung just outside the port. A flame tendril came through, coiled around Powell, lifted him to his feet. From it, a wave of reassurance flowed. Into his brain came a soundless message.

"Our enemy is destroyed, Powell."

"You're Eberle?" Mike cried. Still shuddering in reaction, he felt like a frightened child in the clasp of this man who was now more than human.

"Yes. I was Eberle. I completed the experiment. Too late to save Stackpole, I know. I am sorry for that." There was a pause. "But more delay is unnecessary now. Take the ship back to New York. You must be there when I return the city to Earth."

"You can do that?"

"Yes. I can operate the dimensional machine of the Colossi with the energy I possess. Only—"

"What?" Mike asked anxiously.

"I must remain here. I can't return with New York."

"But, isn't there any way—" Powell cried, his voice unsteady.

"No," the mental voice replied without regret. "My energy must operate the machines. To accomplish that, I must be here. Then I shall destroy this laboratory. The experiment of the Colossi must never be duplicated."

A FINGER of flame touched Powell. He knew it was a caress of farewell.

"Wait!" he said urgently. "You must answer the questions that Earth would never know otherwise."

"What questions are these?" the flame entity asked quietly.

"Who were the Colossi? What did the Spacehawk have to do with them? How much did he know before Manhattan vanished? What did he have to gain?"

"I forget that men have not my intelligence," the flame said. "You are right. Mankind should know what happened, and that it can never occur again.

"The Colossi, of course, were fourth dimensional beings who shared a world with a race that threatened their existence. They discovered the secret of the mutation ray, but they dared not use it on their enemies. The ray, you see, might turn the underground race into a power strong enough to destroy them. It might also slay the enemy.

"An Earthly scientist, fighting an unknown plague with an unknown antitoxin, would test it first on animals and judge by their reactions. Likewise, the Colossi tested their ray on the inhabitants of Manhattan."

Powell gritted his teeth and nodded.

"At first, they projected their ray across the dimensions. It could not have been easy to observe the results. So the Colossi learned how to bridge the fourth-dimensional gap between the two coexistent universes. They revolved a portion of their own world into the space formerly occupied by New York. New York, on the other hand, was swung through hyperspace into this universe.

"They turned the full power of their ray on the city. If it destroyed the people, they would feel safe in using it on the enemy."

The emerald fires pulsed and flared, dancing impatiently.

"The Spacehawk?" it went on. "He was an opportunist. The ray, at first, made him a scientific criminal genius. He really knew nothing about the mystery at that time. Only after Manhattan had been swung into the fourth dimension did he guess the truth.

"But he could do nothing. He waited, watching my work. When he discovered I had found a weapon to fight the Colossi, he stole it, thus becoming an entity of pure energy.

"It was his only escape. If I triumphed over the Colossi and returned New York to Earth, the Spacehawk would still be a hunted criminal. But if he defeated them, incidentally becoming a being with more than mortal powers, he need fear nothing.

"As the Spacehawk, you understand, he faced the end of his road. There was also the temptation of becoming superhuman, almost a god! So he gambled on what didn't seem to be a gamble. And he lost."

Without warning, the shell of fire was gone. The brilliant emerald glow faded, streaking high into the gray infinity of the sky, where it lost itself.

POWELL felt slightly insane. The reality of the moment before seemed like a nightmare horror. Manhattan in the fourth dimension was a madman's dream.

But he couldn't escape the fact that his ship hovered in a pallid, gray, unearthly sky that cut off sharply all four corners of the island below. He knew, beyond denial, the sky was the giant laboratory.

His life was down there—Hector, Sue Clark, Lynn Plumb, the boss, and Summit—the world he had known ever since childhood.

New York would be returned to Earth, would pick up the threads of its existence where they had been dropped. Once more limousines would roll down Fifth Avenue. Subways would roar and newsboys yell. The electric signs would flash as always above Times Square. Men and women would dance in the roof gardens.

Life would go on. Mike knew he would resume his habits automatically. He'd go chasing through the System, canning scoops, trying to beat his rivvals, cursing Hector and arguing with the chief. . . .

The ship grounded in its port on the roof. Powell stepped out. He was alone.

Eagerly, he looked up. The gray void was featureless, but it seemed that a faint green glow was brightening far away.

And Mike Powell, staring up into the dimness of an alien world, whispered:

"They'll forget. They'll forget you, Eberle. But I won't. My life will be the same, sure. I'll still chase scoops and get drunk and be Mike Powell, and probably hook up with Sue Clark. But I won't forget. I won't forget."

Next Issue: TWICE IN TIME, a Complete Book-Length Novel of the Man Who Changed History by MANLY WADE WELLMAN

"I want a better-looking shave—
A blade priced so I really save!"

"The Thin Gillette, men are agreed,
Gives greater comfort, too—and speed!"

The Thin Gillette Blade Is Produced By The Maker Of The Famous Gillette Blue Blade

Science and Reality

A Guest Editorial

By MANLY WADE WELLMAN

FAMOUS SCIENTIFICTION AUTHOR

THIRTEEN years ago this summer I wrote and sold my first science fiction story. It was in form of a diary, dealing with one lurid experiment, and tragedy at the end. It was ponderous, pedestrian and larded with pseudo-scholastic jargon.

It took considerable trial and error to develop a story of science which yet was human and pleasant. Some of the real writers in the field were doing it, even more than thirteen years ago—Merritt, Cummings, Williamson, Lovecraft — but we others had not the sense to do likewise. We mixed science and melodrama, neither very good in quality, and the results were often repulsive. We did not approach science as a factor of human life, though we might have taken the hint of Edgar Allan Poe, himself a master science fictionist, that it needed most careful fitting into literature:

Manly Wade Wellman

Science! true daughter of Old Time thou art!
Who alterest all things with thy peering eyes.
Why preyest thou thus upon the poet's heart,
Vulture, whose wings are dull realities?
How should he love thee? or how deem thee wise,
Who wouldst not leave him in his wandering
To seek for treasure in the jewelled skies,
Albeit he soared with an undaunted wing? . . .

Well, it may not be as bad as that. The poetry has not been frazzled out of the souls of Einstein or Jeans or Haldane. Their enthusiasm and heartfelt hopes touch to life such esoteric matters as a proposition in mathematics, a formula in chemistry. These are lovely to them as forest-crowned heights or rushing rivers. And the analogy may be extended.

Science is, after all, nature. Man becomes part of it, running with it, often fighting against it. He may not always understand, but he can appreciate. To the scientist, the skies hold more wondrous things than jewels, and to them his fancy soars, on rockets that are more powerful than Poe's undaunted wing.

We who write science fiction have learned the hard way—trial and error. I hope that my own work has improved, both as science and as fiction, since that beginning of which I have spoken; indeed, if it has not so improved, I am certainly on my way out as a writer for this type of work, and for the people who read it. I cannot help but take my job seriously, since it is taken seriously by the fans, and without being stuffy, I undertake to do my best. That is spoken, I dare say, for every writer in the field who has a lick of sense.

Look through the rest of this magazine. The tales are not dry lectures sugar-coated with a trifle of romance and a hurly-burly of battle. They tell, fancifully but vividly, of men who see science face to face—not through a glass darkly. The space-ship quivers and springs under practiced guidance, as serviceable as a knight's good horse. Even the robot, jangling and methodic, becomes a companion. These things are added to us, as writers and readers, because we have come to accept science as part of life rather than a mystery to be stared at and shrunk from.

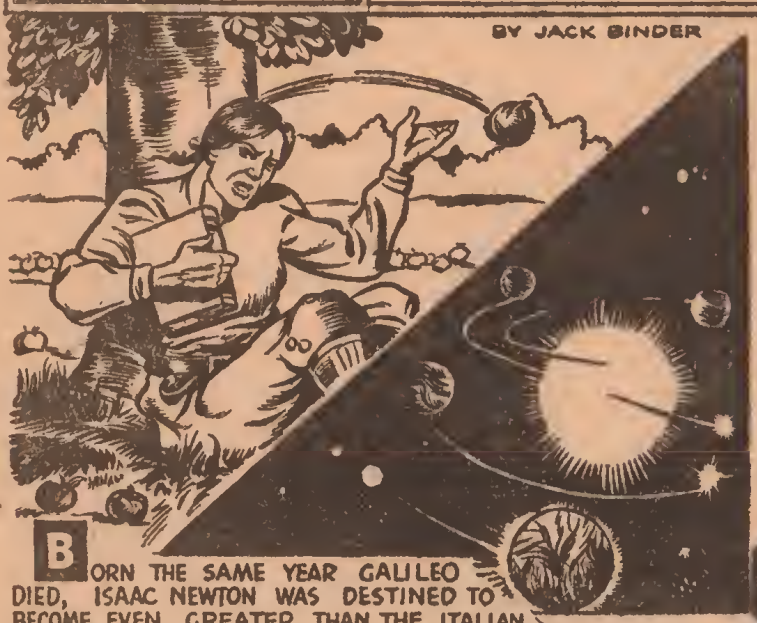
And, what has been said so often, but not too often—these dreams we find dreamable are on the way to become reality; not sordid reality, but glorious and living.

THEY CHANGED THE WORLD

THE LIFE STORY OF SIR ISAAC NEWTON

WHO DISCOVERED THE LAWS OF GRAVITATION

BY JACK BINDER



BORN 1642 DIED 1727

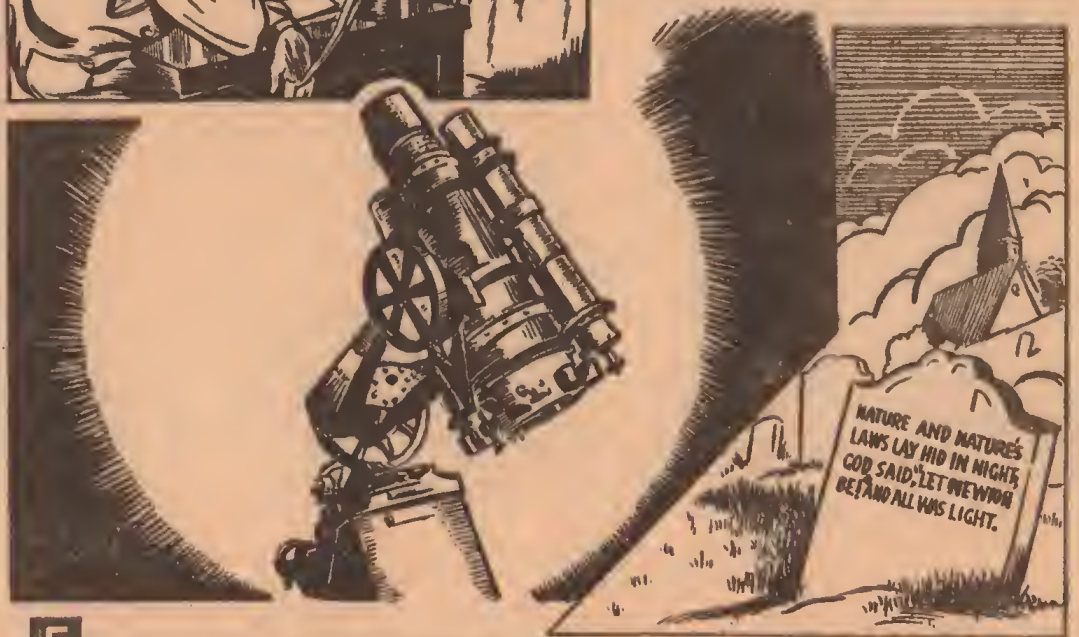
BORN THE SAME YEAR GALILEO DIED, ISAAC NEWTON WAS DESTINED TO BECOME EVEN GREATER THAN THE ITALIAN GENIUS. AT THE AGE OF 23, NEWTON FORMULATED THE GREAT LAWS OF GRAVITATION! MOST HISTORIANS AND SCIENTISTS... INCLUDING EINSTEIN . . . AGREE THAT IT IS THE GREATEST SINGLE CONCEPT TO SPRING FROM THE HUMAN MIND. IN ONE MASTER STROKE, NEWTON HAD LINKED THE FALL OF A MERE APPLE TO THE ETERNAL ORBITS OF PLANETS, AND TO THE WHOLE STRUCTURE OF THE UNIVERSE!

CURIOUSLY ENOUGH, ONE OF NEWTON'S BOYHOOD PRANKS WAS TO TIE A CARDBOARD LANTERN WITH A LIGHTED CANDLE TO A KITE AND FLY IT OVER THE VILLAGE. THE VILLAGERS WERE FRIGHTENED, THINKING IT A COMET!

Next Issue: The Life-Story of THOMAS

THOUGH NEWTON HAD PUT HIS FINGER ON THE PULSE OF THE UNIVERSE IN 1666, THE WORLD DID NOT HEAR OF IT UNTIL EDMUND HALLEY...DISCOVERER OF HALLEY'S COMET...VISITED HIM IN 1684. NEWTON CASUALLY DISPLAYED HIS CALCULATIONS ON ORBITS, INCLUDING THE COMETS, PROVING IT WOULD RETURN AGAIN AND AGAIN. REALIZING WHAT A STUPENDOUS DISCOVERY THE SCIENTIST HAD MADE, HALLEY PUBLISHED NEWTON'S NOW-FAMOUS *PRINCIPIA*. THE OBSCURE NEWTON WAS HAILED AS A GENIUS, AT THE AGE OF 45! KNIGHTHOOD WAS CONFERRED BY THE REIGNING KING OF ENGLAND!

MANY INTERESTING LEGENDS HAVE COME DOWN TO US ABOUT NEWTON. HIS ABSENT-MINDEDNESS WAS PROVERBIAL. ONCE, HE LEFT VISITING FRIENDS STRANDED! HE HAD GONE FOR A BOTTLE OF WINE, FORGOTTEN IT, THEN WENT TO HIS STUDY, WHERE HE LOST HIMSELF IN DEEP MEDITATION!

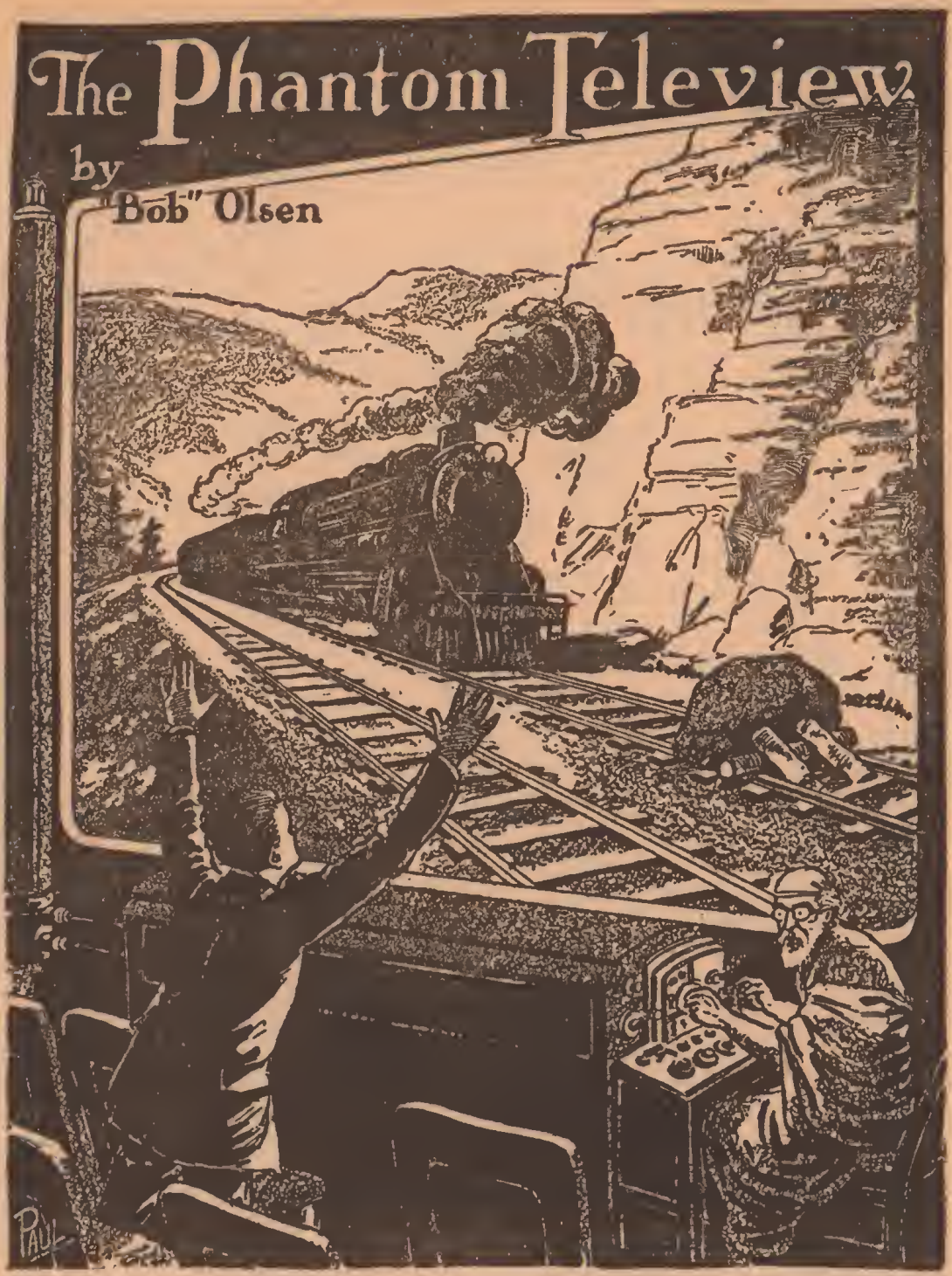


EXTREMELY MODEST, NEWTON WROTE TWO FAMOUS PERSONAL COMMENTS. ONE..."IF I HAVE SEEN FURTHER THAN OTHER SCIENTISTS, IT IS BECAUSE I STOOD ON THE SHOULDERS OF A GIANT." ALSO..."I AM LIKE A BOY, AT THE SEASHORE, PICKING LITTLE PEBBLES OF KNOWLEDGE FROM THE GREAT OCEAN OF TRUTH." TWO EPITAPHS REMAIN OF THIS SELF-EFFACING GENIUS AMONG GENIUSES. THE GIANT NEW 200-INCH TELESCOPE AT MOUNT PALOMAR, BASED ON NEWTON'S FIRST REFLECTOR MODEL; AND THE VERSE WRITTEN BY THE GREAT POET, POPE.....

ALVA EDISON Told in Pictures

The Phantom Teleview

by "Bob" Olsen



State Penitentiary,
San Quentin, California.

DEAR Mr. Editor:

This letter is written as a last desperate effort to prove that I am innocent of a terrible crime for which I have been condemned to die on the gallows.

Perhaps you wonder why I am addressing this singular communication to you. In one way you are a total stranger to me, but in another sense you are one of the best friends I have ever known. I am a great admirer of science fiction. Through reading the stories in your magazine I feel that I have come very close to you. That is

Denker's Machine Could Work Miracles!

why I now take the liberty of asking you to render me a service that may bring me freedom instead of a shameful death.

I have become convinced that there is only one man on earth who can verify the story that can establish my innocence to the satisfaction of the authorities. And I am equally certain that the one way to reach this man is through the columns of your magazine, which is sure to be read by a person of his scientific attainments and inclinations.

So I am asking you to publish this letter. Were I able, I would gladly pay you at your regular advertising rates for doing this, but unfortunately I am a poor man. My scanty savings have long since gone into the pockets of the lawyer who, though skillful in saving those who are guilty, seemed powerless to aid a man who is absolutely innocent.

The crime for which I have been sentenced to pay the supreme penalty is that of train-wrecking. The laws of California, as you probably know, make train-wrecking a capital offense, punishable by execution on the scaffold.

If you have read the newspaper accounts of my arrest and trial you will understand what I mean when I state that I am—in a certain measure at least—a victim of public hysteria. Previous to the wreck of the Southern Pacific's crack train The *Lark* on that memorable April morning, there had been no less than three similar accidents, all within two months. In each case the express car had been looted and in each case the police had failed to apprehend the criminals.

Bob Olsen
The author of this story

It seems doubly ironical to me that I, the man who supplied the police with information which subsequently resulted in the capture of the real criminals, should have fallen into the same net.

But I fear I am rambling a bit, so perhaps I had better start at the beginning and tell the story in chronological order just as it happened.

ON the morning of Saturday, April 6, I awoke with a start. For some unaccountable reason my mind was all wrought up over the idea that I had overslept. While this would not have mattered much under ordinary circumstances, it was rather disturbing on his particular day. You see, I had planned to meet the train on which my mother, whom I had not seen for seven years, was coming from San Francisco.

I hopped out of bed and looked at my watch. The hands pointed to seven fifty-six, and The *Lark* was due to arrive promptly at eight. The apartment house where I lived was about fifteen minutes' drive from the station. I figured that my mother, when she found no one to meet her, would wait at the station for at least a quarter of an hour, which would allow me

EDITOR'S NOTE: Some stories are forgotten almost as soon as they are printed. Others stand the test of time.

SCIENTIFICTION HALL OF FAME STORY

Because "The Phantom Televiewer," by Bob Olsen, has stood this test, we are nominating it for SCIENTIFICTION'S HALL OF FAME.

In each issue we will nominate—and reprint—another favorite of the past.

Will you vote for your favorite? Write and tell us what it is.

We hope in this way to bring a new prominence to the science fiction gems of yesterday and to perform a real service for the science fiction devotees of tomorrow.

just the time needed to get there, provided I dressed quickly and had reasonable luck in driving through the traffic.

To jump into my clothes was the work of a minute and I was soon in my flivver, headed for the station at a speed as swift as I dared to drive. In my excitement I had gone several blocks before I realized the unusual lightness of traffic that morning.

Ordinarily eight o'clock in the morning is one of the busiest times of the day, with a steady stream of cars going in both directions. But on that day the streets seemed almost deserted. When I turned the corner into Pico Street, one of the busiest thoroughfares in Los Angeles, there were but two vehicles in sight and one of them was a milk wagon.

Though this seemed rather singular to me, I was so intent on reaching the station on time that I merely regarded it as a fortunate circumstance, since it would enable me to make better time.

As I drove through the business section of the city, I couldn't help noticing the scattered condition of traffic and the small number of pedestrians on the street. Then a clock in front of a bank caught my attention and I was astonished to see that it was only five minutes after six. I looked at my watch. It still registered seven fifty-six. When I held the watch to my ear I discovered that it had stopped.

My first impulse was to return to my apartment and go back to bed. But on second thought, that seemed a silly thing to do—particularly now that I was so thoroughly awake and keyed up. So I drove to the station, parked my car and entered the waiting room. I bought a magazine and sat down to read, but my mind went wool-gathering. My mental state was such that I found it impossible to concentrate on the printed page. I threw the magazine down on the bench and strode out in the street. Exercise was what I needed most, I told myself, as I set out on a brisk walk, but with no particular destination in mind.

I was walking along a narrow side street, seven or eight blocks from the station, when my attention was arrested by a very peculiar looking building. It was one story high and was built of stucco, colored a brilliant red. The edifice was set back about five feet from the sidewalk and the intervening space was planted with dwarf palms, cactus plants and other desert vegetation. On the roof was a very odd conglomeration of tubes, mirrors, wheels and other machinery, unlike anything I have ever seen elsewhere.

But, strange as all this seemed, amid such incongruous surroundings, the thing which attracted my attention most was a very ordinary and commonplace thing, namely a sheet of note paper tacked to the door. Overcome by curiosity, I crossed the street and approached close enough to the door so that I could read the following announcement:

NOTICE

A public demonstration of the Televiewer, a new invention, will be given here daily between the hours of 6 A.M. and 6 P.M. Visitors are welcome. Admission free. Walk in.

Here, I thought, was an ideal way for me to occupy my time for the next hour and a half. I am intensely interested in both mechanical and scientific things and the prospect of witnessing the demonstration of a new invention appealed to me strongly.

I PUSHED open the door and entered. The room was so dark that I could not distinguish a single object. I took a step or two and then stood still, blinking like an owl. I couldn't help jumping when a thin, high-pitched voice at may elbow said: "Good morning, my friend."

"Oh, good morning," I gasped, turning in the direction of the voice, "I hope I'm not intruding at this early hour. I saw the sign on the door and I came in to see the demonstration of the new invention."

"Oh, yes. And let me assure you that you are very welcome. You couldn't have chosen a better time to see the Televiewer demonstrated. But won't you be seated? Here is a chair —right over here." A bony hand clutched my arm and I was led to a seat. My companion sat down beside

me. "It's a bit dark in here," he apologized, "especially when you come right in from outside. But your eyes will soon adjust themselves, and there will be plenty of light as soon as we start the Teleview going. My assistant is getting things ready and she'll have it working in just a few moments. In the meantime, perhaps I ought to introduce myself. I am Pythagoras Denker, the inventor of the Teleview. While we are waiting, perhaps you would like to learn something about the nature of my invention."

"Indeed I would," I assured him.

"As the name indicates," he continued, "the Teleview is a device for viewing things that happen at a distance."

"O, I see," I interposed. "It's a television apparatus."

"Not at all," he corrected. "My invention is quite different from the regular televisor. To be sure, it is like television is the sense that it enables one to see things at a distance, but the essential difference between the Teleview and a Televisor is this: For Television it is necessary to have both a sending and a receiving apparatus and it cannot be used except in places where the object to be seen can be brought to the sending station or where the sending station can be brought to the event which is to be transmitted over a distance.

"The Teleview is not hedged in by any such restrictions. All the apparatus is concentrated at the receiving end. No sending set is required. Within certain limits, it may be focused on any spot so that one actually sees the events themselves, exactly as they happen."

"Do you mean to tell me that you can focus your apparatus on something that is happening in India or Arabia and be able to see it here at the very instant it is taking place over there?" I asked doubtfully.

"The task you have outlined cannot be performed quite yet," Denker explained, "for the simple reason that the places you mentioned are on the opposite side of the earth. However, even that can easily be accomplished when we have established stations at four or five strategic points around the earth, so that we will be able to pick up any event, no matter where it happens and relay it on to our other stations.

"At present, this station has the only Teleview apparatus in existence. The range of this set is limited only by the curvature of the earth. With it I can get most of Europe and the western part of Africa to the east and the coast of Asia on the west. Naturally anything in the United States or in the portion of the Pacific north of the Equator can easily be focused in."

"Interesting, if true," I remarked, tritely. "And just what do these distant events look like after you have them focused here?"

"The best way to answer that question is to show you the device in operation. It ought to be ready by now. If you'll pardon me a moment, I'll see what the trouble is."

HE had not been gone very long before the room became flooded with ghostly light, like the wan glow of a midsummer twilight. Then something began to take shape on a screen at a further end of the room. At first I could make out nothing but a mass of clouds which swirled and throbbed and vibrated in a most mysterious manner. As the clouds slowly melted I was able to disinguish the coast line of a continent as one would expect it to look when viewed from a great height. As the image on the screen became larger and more distinct, I fancied I could recognize the contours of the western portion of Europe, including Great Britain, France and Spain.

The ground seemed to be rising to meet us at a terrific rate of speed and it was but a moment or two before we appeared to be hovering over a large city. That unmistakable landmark, the Eiffel Tower, told me that the city was Paris. Whatever it was that was producing these effects certainly was giving a marvelous impression of reality. The scene looked remarkably realistic and was shown in natural colors, so that I couldn't help experiencing the illusion of looking at the objects themselves.

"What do you think of it?" said a

voice in my ear, and for the first time I noticed that Denker had returned and was again beside me.

"Very interesting," I complimented him. "Best photography I have ever seen. The picture must have been taken from a Zeppelin, wasn't it?"

"But surely you don't think that is a motion picture, do you?" Denker demanded.

"Well, I'll have to admit that it's different from any picture I've ever seen. And when I say different I mean better. But if it isn't a picture, how in the world can you get an effect as realistic as that?"

"By looking at the scene itself," was his preposterous reply. "This is what I tried to convey to you a while ago. The Teleview is simply a device for looking at objects from a distance. Would you like to know how it works? The principle is quite simple. Shall I explain it to you?"

"If you will, please. I'd certainly like to learn all about it."

"You know what causes a mirage?"

"I think I do. Isn't it just an image of some object beyond the horizon, reflected by a stratum of air which is denser than the atmosphere close to the ground?"

"Substantially, you have the right idea; and the Teleview works on exactly the same principle, except that a mirage can occur only under certain circumstances, while the Teleview will work anywhere and at any time—that is, provided there is light enough to produce an image.

"You seem to be pretty well informed and possibly you also know that the atmospheric envelope surrounding the earth is by no means homogeneous. Every intelligent person is aware of this fact. It is not so well known, however, that the hollow sphere of air is definitely divided into a series of concentric spheres, each one differing in density from the portions contiguous to it. You can get a clear conception of this by thinking of the atmosphere as a huge and tenuous onion with the sections represented by a series of strata of varying density.

"You know, of course, that when light strikes the surface of a transparent medium such as glass, water or air, some of the light is transmitted but part of it is always reflected. This is well illustrated by the way in which a store window will reflect your image, especially when the space beyond the pane is dark.

"THAT being the case, you can readily understand that the atmosphere surrounding the earth is really made up of a series of concave mirrors, which, while they permit a great deal of the light to pass through them, also reflect a small though appreciable portion of the rays which impinge on their surface.

"In the Teleview, I have discovered a method of focusing on these stratified mirrors and of collecting only the light rays which are reflected by that one mirror. By varying the angle at which my focusing tube is inclined and by adjusting it to a stratum of just the right altitude, I can 'bring in' almost any location within a radius of several thousand miles from this point. If you think of this device as doing the same thing to light waves that the radio does to radio waves, you will see that this part of the performance is like tuning in on a particular wave length."

"I see what you mean," was my response. "But a shell of atmosphere could hardly reflect an image as clear as the one we now see on that screen there. You said yourself that only a small proportion of the light rays would be reflected by any one of your air-mirrors."

"That is true. But to return to my analogy, you must remember that the radio receiving set not only is able to pick out just one of the many waves that are constantly throbbing through space, but it must also amplify the impulses.

"In like manner the Teleview is able to amplify the very giant images that are brought to us by our focusing tubes. If you are at all familiar with the action of light on certain chemical substances such as selenium, you can readily perceive that there is nothing particularly magical about the idea of amplifying light waves and the images which are built up by them.

"Please don't get the idea that I use selenium in the Teleview. I merely mentioned that because it is the most familiar of the light-sensitive substances. The method which I use for magnifying images and for amplifying them to natural brilliancy is a secret that I cannot very well divulge to any one until my patents have been filed and granted. However, I think I have told you enough so you can understand the feasibility of the principles on which it is based."

ALL during the time we had been conversing, the picture on the screen had been constantly changing. Most of the scenes had been unfamiliar to me and I had been too much absorbed in Denker's exposition of his invention to pay much attention to him.

But suddenly something loomed up which I recognized instantly. It was Temple Block in Salt Lake City. There was no mistaking the convex, turtle-back roof of the tabernacle, with the stately spires of the Mormon Temple rising majestically behind it.

"Why, that's Salt Lake!" I exclaimed. "It sure looks natural. Almost makes me homesick to look at it."

"And do you realize that what you are now looking at is not a picture photographed some time ago but is the actual scene that is taking place there right now?"

"I'll have to take your word for that. Except that it is wonderfully well done and realistic, it might just as well be a picture so far as I can see. However, you certainly have a wonderful thing. I suppose you intend to use it principally for producing travelogs, for teaching geography and for similar purposes."

"Those are but minor uses," he assured me. "The most important function of the Teleview is to witness important events while they are actually happening. Occurrences which are scheduled to occur can easily be seen from start to finish. For instance, on March 4th I sat here and saw the ceremonies in connection with the inauguration of the President.

"We can also use the Teleview to witness events that are described in the newspapers, such as battle scenes, big conflagrations, floods, and other interesting occurrences. I'll see if I can bring in something of that sort right now. Would you mind coming back to the controls of the machine? Then I can adjust it myself, instead of leaving it to my assistant; and I can explain everything to you as I go on."

"That will be fine!" I said, and rose to follow him.

It was then for the first time that I noticed the peculiarities of my host's raiment, which hitherto had escaped notice in the semi-darkness. He was arrayed in a garb of an ancient Greek philosopher.

He certainly cut a comical figure with his skirts flapping about his scrawny, bare legs. A set of mutton chop whiskers and a pair of tiny, rimless glasses, which looked like the lenses of a microscope, added to the grotesqueness of his appearance. (I fear, as I describe these unusual things to you, that you will disbelieve them. I know they sound queer and improbable, but on my oath they are absolutely true.)

"I'll operate it for a while, Eunice," he told his assistant, who seemed to melt out of sight in a most mysterious manner. I couldn't see her plainly enough to make out whether she was young or old, beautiful or ugly.

"Now let's see if I can bring in something exciting," Denker said to me as he took his place at the machine. "According to this morning's paper, the Mexican Federal troops are due to attack the Rebel forces at Corredella. The battle should be on at full swing by now."

He referred to a large map which could be viewed in sections by the simple process of winding up the rollers at either end. When he had located Corredella he made a quick calculation on a scratch pad, turned a calibrated wheel until it indicated the proper figure. Then he made two other adjustments with dials like the combination of a safety deposit vault.

There came the usual flurry of clouds and vapors. These were quickly replaced by a desert scene with nothing but Joshua trees and cactus

to break the monotony of the barren landscape. Apparently the machine had not quite located the spot desired, although there was little doubt that it had picked up some place in Mexico.

DENKER continued to play with the dials and it wasn't long before a small village flashed onto the screen. We focused in just in time to catch the tail end of the battle. Apparently the rebels had not put up much of a fight, for we could clearly make out their nondescript soldiers hurrying pell mell out of one end of the town, while the vanguard of the attacking forces was still several hundred yards away from the other end of the village.

"Try and get some close-ups of those birds," I cried.

"That's just what I'm going to do," Denker responded. "Watch!"

He did something to the apparatus and the scene on the screens seemed to draw closer and closer. He finally singled out a man on horseback who looked like the leader. So close did the Teleview bring the face of this warrior that I could clearly distinguish a livid scar over the Rebel chieftain's right eye.

After a while, Denker directed the Teleview back to the village. We then witnessed a scene which was as amazing as it was unexpected. The eye of the Teleview roved from one group of soldiers to another until it rested on the Federal leader. There was no mistaking his identity. No one else but a general could have born that load of gold braid, medals, brass buttons, epaulets and other impediments with which that august officer had bedecked himself.

Around the general were clustered four men with motion picture cameras —apparently newsreel operators. They were engaged in an animated conversation with the general, accompanied by vehement gestures of protest.

Even without the accompaniment of any talkie sound effects, it was easy enough to get the plot of the scenario being enacted before our eyes. The battle had been fought and won so quickly that the movie men had not been able to get their cameras set up in time to get any of the action. Apparently the general, when he realized that his glorious victory was to go down into history unrecorded by the faithful movie cameras, was even more distressed about it than the newsreel men.

He must have been a very gracious and obliging general. For he issued an order to one of his aides and, a few minutes later, his entire army filed back to the desert again. The cameras were set up and were trained on the troops who now began to advance with rifles leveled in a most terrifying manner.

Well as this re-enacted attack was staged, it did not seem to satisfy the camera men. The trouble with it all was that it showed only the attacking army.

The defenders of the village were completely out of the picture.

The obliging general seemed willing enough to remedy this difficulty. The army was ordered to take up positions behind the barricades of the village. They shot their muskets off into the air and glared out from between the buildings, while the cameras ground out the scene at close range.

That ought to have pleased the most fastidious photographer on earth—but not these newsreel men. We could almost read their lips as they told the general that what they really needed were not separate pictures of the attackers and the defenders but one picture showing an actual engagement between the Rebels and the Federals.

Even that demand didn't seem to faze the resourceful general. He simply divided his forces into two armies —like choosing up sides in a game of one-old cat—and one section impersonated the defending Rebels while the other portion of his soldiers drew off ready to play the part of the victorious invading army. This time everything seemed to go off in grand style—even to the satisfaction of the camera men. That is, until one of the sham rebels, apparently a movie fan, decided to stage a death scene. After making sure that one of the cameras was turned on him he made a wild clutch at his breast and toppled over

in conventional movie style.

Naturally this attracted the attention of others, both "Rebels" and Federals, and there seemed to be plenty who were anxious to rob the genius of his original idea. Within the space of a minute or two, the soldiers on both sides began to die like flies. The carnage was terrific. It wasn't long before both armies were completely wiped out and there were no soldiers left to carry on the battle.

THAT would never do, of course. The soldiers had to come to life and do their act all over again. This time the officers were seen to harangue their men and it looked as if they were assigning certain favored individuals to do the dying stunt and were warning all the others not to die under penalty of severe punishment.

Again the battle raged and the photographers cranked. Then one of the "rebels" entered so well into the spirit of the battle that he forgot himself and discharged his gun in such a way that it winged one of the attacking warriors. This nearly started a real battle, but thanks to the courage of the general, who rode between the two forces brandishing his sword in a melodramatic manner and shouting something at the top of his voice, a catastrophe was averted.

"Well, what did you think of that?" Denker chuckled. "Wasn't that as good as any movie you've ever seen?"

"Better!" I enthused. "I never saw anything so funny in my life."

"Well, it looks like the show in Mexico is over for a while at least. Shall we try somewhere else? Perhaps there is some particular thing that you would like to see on the Teleview screen."

"Yes, there is," I told him. "I am expecting my mother on the *Lark* from San Francisco. She is due in Los Angeles at eight o'clock. By this time the train ought to be coming through the mountains between Burbank and Bakersville. Do you s u p p o s e you could locate the train?"

"I'll see what I can do," he said, adjusting his dials.

It required a little scouting around before Denker located the railroad track, but after that the task seemed easy. He simply directed his receiving tube so that it kept the track in view but moved swiftly in a direction away from that in which we seemed to be looking. Soon the train hove in sight, winding around among the rugged mountains.

Denker certainly showed a lot of skill in manipulating his apparatus. He actually kept the train constantly in sight, giving the impression that we were in an airplane flying just ahead of the train and traveling at the same speed.

Suddenly something flashed onto the screen which made me catch my breath. It was a huge boulder, buttressed by three heavy logs. The boulder was lying between the rails, directly in the path of the onrushing train. In my excitement I forgot that I was over a hundred miles away from the scene and I waved my hands frantically and yelled: "Stop! For God's sake, stop!"

Concealed behind a curve, the obstruction was not observed by the engineer, and the train hurtled onward. I braced myself for a terrific jar, for the train seemed but a few feet away from where I was standing. But naturally I perceived neither noise nor vibration as the gigantic metal train crashed into the obstacle.

There was a sudden burst of escaping steam, a flash of flame, a nightmare of twisted metal, as the great train rolled over into the ditch amid a ghostly silence.

For several minutes I was held rooted to the spot, spellbound by horror. But Denker, with the characteristic calmess of a scientist, continued to direct the dials of his marvelous machine. First he focused it on a close-up of the locomotive. The fate of the engineer and fireman could easily be deduced from the frightfulness of the wreckage. No two men could possibly have survived in that unspeakable inferno.

Then the eye of the Teleview passed on to the baggage car, and here we witnessed an incredible sight.

Two young men approached the car from the direction of the road which at that point ran almost parallel to the

rails. At first we thought they were hastening to render help to the stricken passengers, but we soon learned that their purpose was far more sinister.

Both of them carried revolvers and they walked with the furtive gaits of men who are bent on an evil errand. As they drew near to the baggage car, a man in the uniform of an express messenger appeared at the side door, which was partly open. From the look of anguish on his face and from the way he dragged his body along the tilting floor, we could tell that he was sorely injured.

Without warning, without a moment's delay, one of the youths raised his gun and shot the messenger. It was the most ruthless and horrible act I have ever witnessed.

The two young thugs then entered the baggage car and soon reappeared, each one carrying a heavily laden sack.

In the turmoil of the sudden catastrophe it looked as if none of the other survivors of the wreck, except the messenger, had observed the robbers. At any rate the bandits were not molested as they hurried back to the road and disappeared behind a clump of trees.

But the unerring eye of the Teleview still continued to trail them. A small touring car appeared from behind the trees and we were able to make out that the two robbers were now accompanied by a third—who had apparently been left to guard the automobile.

THE way in which the Teleview kept that car in sight was positively uncanny. I was easily able to make out the license number and I remembered the most important part of it—the last four numbers, which were 1992. "That's easy to remember," I told myself. "Just five-hundred years after the discovery of America."

Denker soon let the car containing the culprits get out of sight and then directed the machine back to the wreck. He scanned closely with the Teleview eye one coach after another.

As a close-up of one of the windows flashed on the screen I had a most uncanny feeling that I saw the terrified face of my mother pressed against the pane. Then the "eye" passed on to the next coach, which happened to be the observation car.

Up until that time I had watched the events subsequent to the wrecking of the train like one who is having a bad dream. The stark horror of the entire disaster kept me glued to the spot. But the sight of my mother's face goaded me to activity.

Without saying as much as "Thank you" or "Good-by" to Denker, I rushed out of the building and dashed on a dead run to the railroad station. When I reached it, I hardly knew where to go, so I raced up to the train dispatcher's office on the second floor of the building. Up there everybody seemed too busy to give any heed to me. Finally, unstrung to the point of distraction, I yelled out, "Hey, you! There's been an accident. The *Lark* is wrecked! For God's sake do something about it!"

This had the effect of drawing attention to me. A man in shirt sleeves, wearing paper cuffs wrapped around his wrist, came over to the counter. "What was that you said?"

"The *Lark* is wrecked in the mountains somewhere the other side of Burbank!" I almost screamed.

"You're crazy," he jeered. "If there had been any wreck we'd be the first ones to know it—long before any one else could learn about it. Unless they saw it happen."

"But I did see it happen!" I cried. "It was only five minutes ago."

"I thought you said it was the other side of Burbank. How in Sam Hill could you see something that happened that far away only five minutes ago? Even an airplane couldn't make it that fast."

He didn't wait for my answer to his query for at that moment some one called him.

"Hey, Bill," a frantic voice said, "for the love of Mike get back to your key. We just got a flash that the *Lark* is in a bad wreck four miles from Calinta Junction."

And amid the excitement caused by that announcement I was again left to shift for myself.

As I stood there I overheard a man

who was excitedly talking to someone over the telephone.

"Man the relief train. Put it on track four. Have Webb phone all the doctors he can get that are likely to be within a mile or two of the station. And for God's sake make it snappy."

That put an idea into my head. I would contrive to get on that relief train. And the easiest way to crash the gate would be to pretend I was a doctor. The scheme worked even better than I had expected. Ten minutes later I was on the train, thundering northward.

I shall not attempt to describe the horrors which met our eyes when we reached the scene of the wreck. The details of the surroundings, the position of the locomotive and the dozen or more coaches, all were exactly as I had seen them a short time previous in the Teleview. But several of the coaches had caught fire and we knew that there must be many human beings imprisoned inside them and in imminent danger of perishing in the flames.

WITHOUT wasting a second, I seized an ax and rushed for the coach just ahead of the observation car. It was lying on its side. I counted off the third window from the front, the window at which I had seen the face which looked like my mother's. One end of the coach was already aflame. There was no time to lose. I swung my ax, breaking the glass into a hundred pieces. I lowered myself into the opening and there, huddled against the further side of the coach, I found the crumpled form of my mother. She was unconscious, but something more than hope told me that she still lived.

There were other human beings in that car, some lying motionless in grotesque attitudes and others writhing and moaning pitifully, but, God help me, I gave no heed to them in my single-minded efforts to rescue the one who meant more to me than any one else on earth.

I finally succeeded in dragging my mother through the shattered window to safety in the open air. Then I carried her to the relief train.

"Where can I find a doctor?" I implored the conductor of the train as I rested my mother on a couch in the improvised hospital.

"A doctor?" he bellowed. "I thought you said *you* were a doctor. What do you think we took you along for, anyway?"

How well that conductor remembered all the details of this incident when he testified a month later at my trial.

I don't remember how I answered the conductor's accusing question. I was too absorbed in watching my mother. A flicker of her eyelids and slight tremor of her body told me that she was recovering consciousness. A moment later her eyes were opened. Luckily she was not seriously injured. She had merely fainted from the shock of the collision.

It was not until I had taken her home to my apartment that I remembered about the criminals whose deeds I had witnessed in the Teleview. I phoned the police station and told the desk sergeant that the murder and robbery had been committed by three young men who drove a Sussex car with a license ending in the numbers 1992. Without giving my name or address, I hung up the receiver.

However, I subsequently learned that the officer was smart enough to get in touch with the telephone operator immediately and in this way he easily traced the call to my apartment.

My tip turned out to be a good one. There were several cars registered with those four final digits on their license numbers, but only one of them was a Sussex. It belonged to Amos Kerr, a youth of nineteen, who, with two other young men of uncertain occupation, lived in an apartment only four blocks away from where I lived.

When their rooms were searched, most of the loot stolen from the baggage coach of the *Lark* was found in their possession. A few articles identified as having been taken from the three previous wrecks were also discovered there.

It was three days after they were apprehended that my own arrest occurred. At first the police told me that I was to be held as a material

witness because of the information I had supplied regarding the car used in getting away from the scene of the crime. But when it transpired that I had announced the occurrence to officials in Los Angeles several minutes before the news came in over the telegraph wires, I was booked on suspicion of complicity in the robbery.

THIS fact, coupled with hatred inculcated by my "squealing" on them, undoubtedly suggested to the three culprits the plot of which I subsequently became the victim. They knew that the evidence against them was so enmeshing that they could hardly expect to escape the noose. Their only hope was an appeal to sympathy on account of their youth. And to bolster up this idea they conceived the infamous idea of making me the scapegoat.

They accused me of having planned all four of the train wrecks in which they had participated. They represented themselves as weaklings—mere tools of an older man who had enticed them into lives of crime and had taught them all the tricks of their nefarious trade.

On the witness stand their stories agreed with suspicious perfection. It was glaringly apparent that they had been coached—probably by their lawyer. But the jury believed them, which perhaps was not surprising in consideration of the other corroborative evidence which was introduced at the trial. The most damning testimony of all was that given by the train dispatcher and the conductor of the relief train.

The prosecuting attorney succeeded in having written into the records the obviously erroneous statements that I announced the occurrence of the wreck fully ten minutes before it actually happened. The fact that I had lied in representing myself to be a physician was also used as evidence of my depravity.

At the preliminary hearing I had told the complete story of witnessing the wreck on the screen of the Televiewer. In their efforts to verify my statements, the police searched the entire neighborhood within fifteen blocks of the railroad station in all directions, but were not able to locate any building such as I had described. The name Pythagoras Denker was not listed in the telephone book nor in the city directory. Under the circumstances my attorney advised me not to take the stand at the jury trial.

"No one would believe your yarn," was the reason he gave me. "The jury will only think you are a colossal liar and that isn't going to get you anywhere."

My obvious defense was that I was the victim of a frame-up. The district attorney parried this by demanding how—unless I was in league with the train wreckers—I knew the wreck was going to happen and told the railroad officials about it before it occurred.

Since I was not permitted to tell about the Televiewer, this damaging question went unchallenged and unanswered. My lawyer came near scoring a point when he brought out that if I were a part of the gang I would hardly be likely to report the number of the automobile to the police.

The prosecuting attorney's answer to this was that I had begun to fear detection and that I had squealed on the rest of the gang in order to divert suspicion away from myself.

Perhaps the strongest argument for my innocence was the presence of my mother on the train. It was hardly conceivable, my lawyer pointed out, that I would plot to wreck the very train on which I knew my mother was a passenger.

In replying to this, the district attorney painted my character in the blackest of hues. He said that a man who would teach innocent young boys to commit such dastardly crimes would be fully capable of murdering his own mother!

You already know the outcome of the trial. I didn't blame the jury. Had I been one of them and had a stranger been in the defendant's place, I would undoubtedly have voted as they did—GUILTY.

Kerr and his two companions were sentenced to life imprisonment and I was condemned to die on the gallows. The reason given by the judge for the severity of my sentence was that I was

a mature man and had been found guilty of plotting a crime and of inducing minors to commit it. Because of the other defendants' youth and because they pleaded guilty he felt justified in sentencing them to prison terms.

So here I am—condemned to die. And the only man who can save me is Pythagoras Denker. I pray and hope that he may see these lines before it is too late and that he will submit to the constituted authorities the indisputable evidence that my story, of having witnessed the wreck of The *Lark* with the aid of his invention, was the gospel truth.

In closing, let me express the appreciation of a condemned man for your kindness, Mr. Editor, in publishing this letter. Yours gratefully,

HARVEY BLAKE.

EDITOR'S NOTE: We were just ready to go to press with this issue of our magazine when we received a second letter from Mr. Blake, which is reproduced below:

Dear Mr. Editor:

Since mailing my recent letter to you I have received some wonderful news. The Warden, who has been good enough to interest himself in my case, secured from me a carbon copy of my former letter to you and sent it to the Governor. Fortunately our present state executive is himself somewhat of a scientist. He was broad-minded enough to realize that there was nothing impossible or even improbable about my story of witnessing the wreck by means of the Teleview.

The Governor has given me a sixty-day reprieve, in order to allow your magazine to reach every part of the world and also gave me his assurance that as soon as Mr. Denker is located and verifies my story I will immediately be released from prison.

Something tells me that, with the help of your magazine, Mr. Denker will be found, and will vindicate me; and I will be saved from a fate I do not deserve. Yours respectfully,

HARVEY BLAKE.

(Copyright 1929 by Gernsback Publications Inc)

Prize-Winning Letters

EIGHT out of thousands! And here they are, the big winners in our national scientifiction cover contest!

In our September, 1939, issue the editor announced that STARTLING STORIES would pay big cash prizes for the three best letters explaining the cover scene. The cover painting, reproduced herewith, depicted two space ships in a cemetery. Strange, spacesuit-clad beings were engaged in the act of removing glass-topped coffins from their burial places, transporting them to their ships. Inside the glass coffins could be seen the figures of beautiful young girls — Earthwomen — apparently just dead, or in some form of suspended animation.

Each letter, therefore, had to explain the following questions: Who are the figures clad in spacesuits? Why are they raiding the cemetery? Are the girls dead —or are they in suspended animation? If the latter, then why? We thought that the many problems would make the contest a tough one.

COVER CONTEST WINNERS

First Prize $25.00

Awarded to Lewis A. Giffin, M.D., Fellow-in-Surgery, the Mayo Clinic, 523 6th St., S. W., Rochester, Minn.

Second Prize $15.00

Awarded to Clarence Granoski, Box 312, Browns Valley, Minn.

Third Prize $10.00

Awarded to Eleanor N. Hutchens, 106 Magee Hall, 37th & Woodland Ave., Philadelphia, Pa.

Honorable Mentions

(One-Year Subscriptions to STARTLING STORIES)—Pearl F. Carson, 636 Inca Street, Denver, Colorado; A. D. Adams, 716 Poplar, Helena, Ark.; W. K. Verniaud, 203½ Du Page St., Michigan City, Indiana; Fred W. Fischer, 2313 Laurel Avenue, Knoxville, Tenn.; Homer C. Mitchell, 2425 Avenue F, Galveston, Texas.

It did. But it couldn't prevent thousands of enthusiastic contestants from submitting their entries. Their warm response was gratifying, and a splendid tribute to their interest in STARTLING STORIES.

Many contestants lost out because of a weak explanation for the motivation of the spacesuit-clad men. Many others explained the state of the girls as due to some blight which affected all women on Earth.

We think the winners selected merit their prizes. Here's the first prize-winning letter, by Dr. Lewis A. Giffin. Congratulations to all the winners—and we'll soon announce a new contest for those who want to try again!—THE EDITOR.

THE FIRST PRIZE-WINNER

IT wae on the night of March 31st, 2039, that the most famoue of quintuplets in history, the beautiful Light sisters, issued their remarkable etatement. The subdued laughter of an indulgent world changed to horror two daye later, when it wae announced that, in accordancs with their own prediction, they had indeed died in their sleep.

For twenty-two years the Light quintuplets had captivated the Canamerican public. Two hundred million admirers, through the medium of the televisor, the radiant ether vibrator and the sixth-eense home audientator, had seen, heard, and supra-sensed their lovely features and voices. But so cleverly had the State managed the public sides of the llves of its five beautiful wards that not one had lost in charm, poise, or any of those qualities which caused Canamerica to take them so enthusiastically to its heart.

Millions of lips sadly repeated their names: Dawn, Opal, Azure, sweet Harmony, and Melicent. On the day set for the final rites, the great crowd which had gathered in the little village of their birth—long since renamed Shrinelight in their honor—followed the cortage to the tiny burying ground.

There, in accordance with the sisters' last will and testament, the transparent, glassite-roofed coffins were lowered reverently into the earth. It seemed to the onlookere that not one of these five could really be dead, so fresh and lovely they looked beneath the transparent covers. But eminent authorities had attested that life wae, indeed, extinct; had watched constantly over them during the 48 hours between their uncanny prediction of death and its mysterious fulfilment.

In part it had been due to this fore-knowledge that the bodies of the Light Sisters were not subjected to post-mortem at the nearby great university. There could have been no foul play: medical science had guarded them too closely. But mostly it was because of their own wish, expressed in the terms of their will, that they were laid out, unembalmed, in the diaphonous costumee which they had designed, looking more like brides than dead clay.

So too was respected the secrecy of the sealed codicil in Azure Light's will, to be made public only if serious emergency were to arise after the death of the quinte.

So a grief-stricken world watched them interred, and with an ache in ite heart went back to its business of getting and epending. . . .

The shock was none-the-less terrible when, after five peaceful years, the newe wae flaehed over a nation-to-nation network, that an act of horrible vandaliem had occurred.

Interpretatione were many and confusing.

in Our Cover Contest!

But the facts were these: On the night of March 31st, 2044, the villagers of Shrinelight had gone to bed as nsual. Heat lightning had flickered silently earlier, but at 1 A. M. a strange humming noise had been heard and two more than ueually brilliant flashes observed.

At 6 A. M. the following morning the crime was discovered. The burying ground had been violated. Where each of the famous five had lain gaped a yawning hole, and there was not a single trace of the glassite coffins. Hurriedly the Federal Canamerican Police were called to investigate. There could be no doubt. Vandals had made off with the bodies of the Light sisters—for what purpose no one could guess.

In the adjacent wheat field were discovered two great scorched grooves in the earth, as if huge cylinders had scraped across each other's course before rising into the air. But such an hypothesis was absurd. No motive power was yet known which could propel against gravity the tremendous masses which theee markings suggested. Nor had anyone ever seen footsteps to compare with the queer paired traces around each violated grave.

At 6:30 the unconscious body of John Caleb Brown was found under a nearby hedge. By mid-morning hs had recovered enough to tell the weird narrative which marked him in most minds as a madman.

His story was simple.

AT 12:50 the night before he had locked the little hangar in which hs repaired the helicopters of his country friends. The night being too pleasant for cyclotoming, he had elected to walk home. At one o'clock, just as he was passing the Shrinelight cemetery, he had heard a rumbling, and from ths adjacent wheat field had come two flashes.

Curiously he parted the hedge. Before him was an amazing sight! Two giant tubes, not unlike tremendous grasshoppers, were lying on the stubble. Their surfaces were colored a deep red, and from rows of portholes came a dull yellow glow.

Suddenly a hole gaped in the side of one, then the other, and runways were thrust downward.

Then a score of the strangest beings John Caleb Brown had ever seen emerged. Six feet tall, their vigorous bodies were completely encased in what resembled diving uniforms surmounted by dome-shaped helmets. Tubes from tanks on their backs fed gas to the helmets, as if Earth's air could not sustain the lungs of these creatures.

Without hesitation the figures dug rapidly at the graves of the quintuplets. Paralyzed with horror, Brown watched them, expecting to see decayed and pitiful remains appear. But to his amazement each body was as fresh as if just buried that very day. It was incredible. No breath of dissolution had touched those lovely features.

He sprang forward, and as he did so a ray blinded him. There was an impression of twin streaks vanishing in the heavens. Then consciousness left him.

When his story became known John Caleb Brown was branded universally as a liar and a madman.

Scarcely had the bewilderment over the desecration of the graves died down, when the secret codicil of Azure Light's will was made public. In this was revealed the inner psychic life of the sisters, and how they had predicted their fate.

But it began earlier than that. It told how their mother, months before their birth, had said to their father, "Robert, I have a conviction that I am to bear five children all at once, for some purpose which I cannot guess, but which will be great beyond any destiny you or I can imagine."

Robert Light had laughed.

THE COVER ON WHICH THIS CONTEST WAS BASED

Later the two had come to view their parenthood as a sacred mission, and had done all in their power to aid the pubiic guardians in giving their five daughters every possible social and intellectual grace.

At the age of sixteen, Azure experienced her strange dream: By her bedside appeared a tall figure clad in weird armor with dome-shaped helmet, whose eyes were marked behind huge yellow goggles. Suddenly the armor faded to transparency. Within it was visibls the figure of a powerful man, young and handsome in body, but with eyes infinitely old. Solcmnly he spoke to her. "You and your sisters are not as other Earth women, nor can you mate with men of this globe. For it is given to you five to re-mother our dying race, to re-endow it with your beauty, spirit and charm. When you are ready we will come for you from our far-away planet. But first you must pass through a dcathlike stats to prepare you for our changed environment." He gave her certain instructions which in her dream she promised to obey.

Then from his finger he placed a ring of wonderful workmanship in her palm, saying, "I will return to place this on your finger at the appointed time."

WITH that Azure awoke. But the strange ring still lay in her hand.

Then Azure knew that this had been no dream.

So, too, did her sisters when she showed them the ring.

How the sisters prepared and were ready when the call came is already known.

The last strangest fact was the testimony of the highest medical authority in the land, who had watched over the Light sisters since their birth. He had long suspected that their body chemistry and internal secretions had been radically different from that of their fellow human beings.

Great was the ridicule with which this was greeted by savants and public. Some one was perpetrating a monstrous hoax. The codicil was repudiated as a forgery, the physician discredited.

But there was one believer.

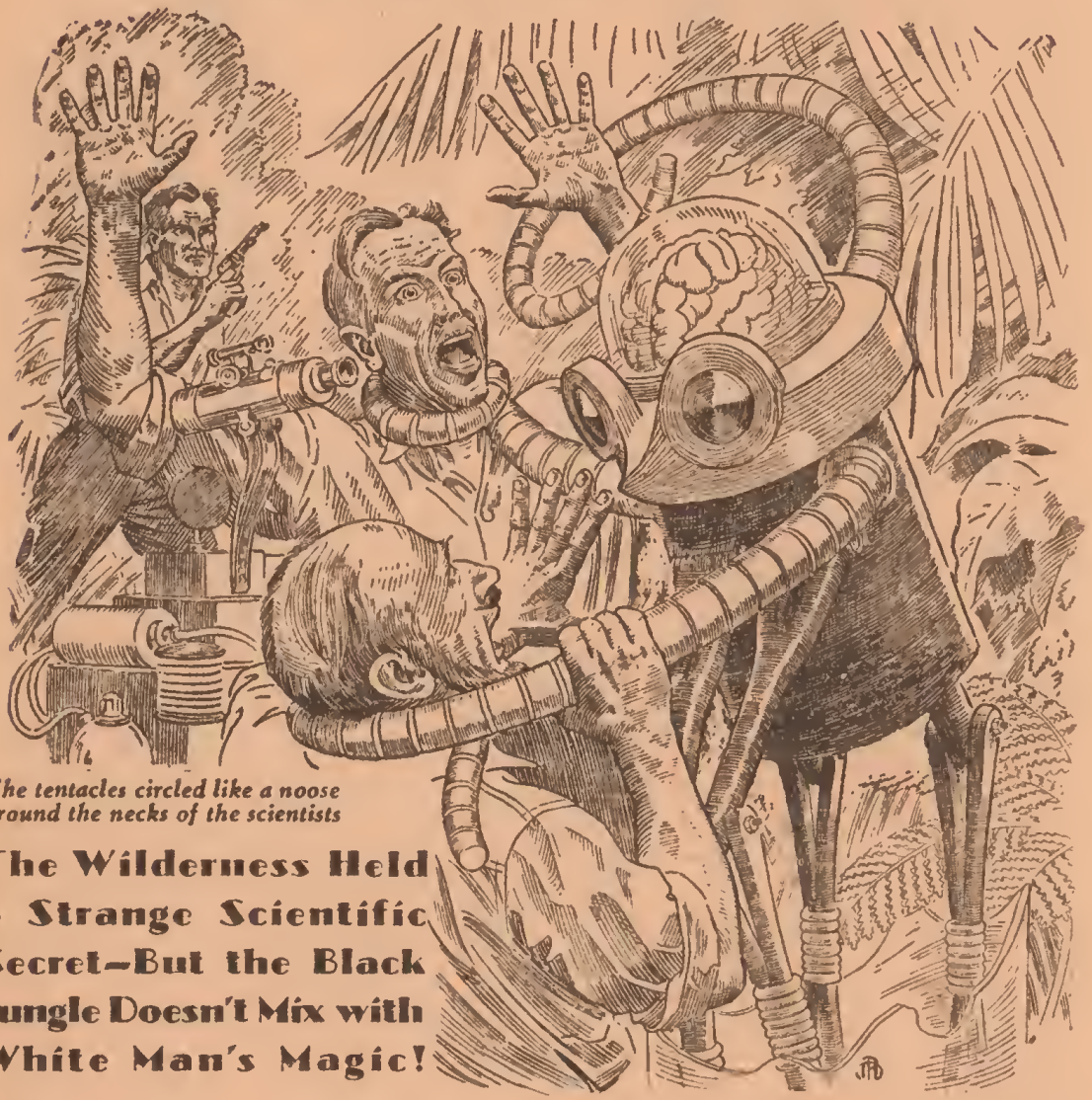
On a quiet hillsids miles away from the controversy a man sat smoking his pipe. He was John Caleb Brown. The stars twinkied in thousands from the night sky overhead. Thoughtfuliy he looked up at them. "Azure, Opal, Dawn, sweet Harmony and Melicent," he said slowiy. "I wonder from which planet your smiles are shedding their beneficent radiance tonight?"—Entered by Lewis A. Giffin, M. D.

WATCH FOR MORE CONTESTS TO COME!

STATION DEATH

By OSCAR J. FRIEND

Author of "Mind Over Matter," "Robot A-1," etc.



The tentacles circled like a noose around the necks of the scientists

The Wilderness Held a Strange Scientific Secret—But the Black Jungle Doesn't Mix with White Man's Magic!

FRESH from the States, imbued with enthusiasm, Ben Langley approached the Tarquist Experimental Station with the eagerness of a young puppy. It wasn't only the spirit of adventure that urged him. He was looking forward to excitement of carrying on the research work of his old friend and classmate, George McAlpin, who had died of fever here at this God-forsaken spot in the Belgian Congo.

Langley received his first disappointment, a dampening of his ardor, immediately upon his arrival. Dr. Tarquist himself was there to meet him at the landing. As Langley clambered out of the wheezy, smelly little river launch the scientist was surveying him with cool, brown eyes.

"You're Ben Langley, I presume," he said brusquely. "The last mail brought me word of your coming to replace McAlpin. I'm Tarquist. Come up to the house."

Langley's half-phrased greeting died in his throat. He had thought white men jumped at the pleasure of meeting their own kind thousands of miles from civilization. But without waiting for a reply, Tarquist turned and headed up

the slope from the landing as coolly as though he had parted from Langley not an hour before.

Crestfallen, thoughtful, Langley frowned as he picked up one of his bags and his gun case deposited by the porters on the little wharf. He followed to the rambling bungalow set on stilts in a small clearing in the lush, steaming jungle.

Tarquist, tall, with a high forehead and a crisp little mustache and beard which made Langley think of a French duke, led the way into the house. The natives dropped the newcomer's baggage on the front porch and fled precipitately back to the launch. Almost instantly Langley heard its *putt-putt-wheeze* as the craft headed back downstream, severing his last connection with civilization.

"This will be your room," said Tarquist, indicating a chamber on one side of the bisecting hallway. "Put down your bag and come on to the laboratory. I'll have Humphrey show you around. Not figuring on any big-game hunting, I hope. Nothing worthwhile close by, and we're too busy at research to stray far."

"To tell the truth," Langley replied, a bit ruffled, "I didn't know just what to expect when I took this job, only that I'm to take George McAlpin's place on your staff."

Tarquist didn't answer. He seemed coldly indifferent, waiting almost impatiently for Langley to come on.

"When did George die?" went on Langley.

"Three months ago. This was his room. And we work hard here, Langley. I hope you can fill McAlpin's shoes. The laboratory is this way."

At the rear of the bungalow was a good-sized room with a skylight. It was fairly crowded with workbenches, retorts, racks of chemicals, stray bits of electrical parts, pieces of metal, microscopes, slides, test-tubes, and—of all things—a glistening white cabinet filled with surgical instruments. A man was humped over a table, his back to them.

"This is Langley, the new man," announced Tarquist. "Humphrey—my first assistant."

Humphrey raised his head and took a casual look. He was tall, husky looking, and not over thirty—a blond Englishman.

"Hello," he said, and turned back to his work.

Langley felt he had had about enough of this sort of thing.

"See here," he protested angrily, "what sort of booby hatch is this place? What's the matter with you men? Why is this station considered taboo by the natives? I had the devil of a time getting carriers to bring me upriver when they learned I was coming here. If it hadn't been for the commissioner a hundred miles down lending me his launch I wouldn't have made it."

TARQUIST merely smiled at this outburst. Humphrey didn't even stir.

"Native superstition of white man's magic, I suppose," answered the scientist. "Very good thing. It keeps them away and out of mischief. Make yourself at home. Humphrey will explain things."

Make himself at home! What a laugh! Nevertheless, Langley managed. In the days that followed he found himself slipping into the routine work of checking cultures and recording statistics on the two principal diseases this Experimental Station had been founded to investigate—yaws and the tsetse sickness. Tarquist supervised his work, but Langley noticed that he had most of the work to do.

Tarquist and Humphrey spent less and less time in the laboratory with him. They seemed mysteriously interested in some other experiment about which they told him nothing. There were no servants, each man taking turns at cooking and cleaning up the bungalow, which struck Langley as being a queer mode of existence. His two companions had worn a little trail back into the jungle behind the house.

When Langley asked about it, Tarquist only smiled.

"Specimens," he explained enigmatically. "You stick to your lab work for a while. In good time I will show you what I am doing."

Things rocked along for a couple of

months, Langley slowly acquiring a knowledge of his surroundings, his work, and his two inscrutable companions. It gradually became borne in on him that he was doing all the research work for which the Station was established, while the other two directed their energies to some queer experiment back at the end of that narrow, tortuous jungle trail.

One morning he rebeled. Abruptly, he got up from the breakfast table.

"I'm taking a vacation today," he announced. "It's hot and muggy—stifling in the lab. I'm going hunting."

Tarquist and Humphrey glanced silently at each other as Langley went to his room and brought out his gun case. He proceeded to assemble the high-powered .380 repeater in the living room.

"Just what," asked Tarquist softly, "do you expect to hunt?"

"Anything to break the monotony," said Langley in a curt tone.

"We have no guides," said Tarquist. "There's nothing worth hunting on this side of the river."

"You'll get lost," added Humphrey. "Ghastly place, the jungle, dripping and dank and smelly."

"Too bad," said Langley. "I'm going to sample it."

Silence.

"Well," said Tarquist after a long moment, getting up, "since you insist, I'll go along with you. No object in letting you get lost. You run the laboratory tests this morning, Humphrey."

Tarquist outfitted himself with a light fowling piece he dug up from somewhere and an automatic which he strapped about his waist. Then, with Langley, he plunged into the wilderness of the jungle. They headed downstream for two or three miles, gradually working in a circle away from the river.

Of big game there was none. Snakes, monkeys, and some variety of parrots were all Langley saw. His trophies were insect bites, slime, and plenty of sweat. Tarquist strode along without much effort. The man seemed tireless. On the way back, Tarquist spoke.

"Satisfied?" he asked. "Running around like this is what gave McAlpin his fever."

"I guess so," admitted Langley, baffled. "Say, how did McAlpin die?"

"Fever and dysentery. Here's his grave."

Tarquist halted in the trail beside a low-lying mound which was scarcely discernible under the creeping attack of the ever-voracious jungle. Langley stared.

"Why did you bury him so far away?" he asked.

"Four hundred yards isn't far away," answered Tarquist. "You're lost, aren't you?"

Langley had to admit it.

"Come on," said Tarquist. "The Station is to our left through this mat of stuff. We're back at the river."

They broke through the tangle, and Langley saw the bungalow before him.

FOR several days the young American was content to resume laboratory work. Then he got to speculating on what mysterious tie pulled Tarquist and Humphrey out into the jungle day after day. His curiosity became so strong that he abruptly made up his mind to follow them the next morning.

After both men had left the bungalow Langley put aside his work and clapped his helmet on his head. Arming himself only with an automatic, he slipped silently along the narrow trail in the rear of the house.

He couldn't have followed it more than six hundred yards when he heard voices. Tarquist and Humphrey were yelling excitedly. Langley pushed forward to where the trail debouched in a small clearing and came upon a startling, incomprehensible sight.

Behind a mass of machinery and gadgets which included a tank of some sort of gas stood Humphrey, directing a beam of light on a huge bell jar. Tarquist stood at the side of the stand upon which the bell jar rested, peering intently into it. And the object enclosed therein was the strangest part of the entire business. It was nothing less than a mechanical robot of red steel and looked like a bell buoy.

It was on four slim metal legs and had three brassy looking tentacles for arms. For a head it had a small glass dome and a pair of ludicrous eyes

which must have been photo-electric cells. But most horrible was the thing beneath the glass dome. It appeared to be a pulsating human brain of giant size!

Langley could not restrain an outcry. Now he knew his two companions were madmen.

The cry betrayed him. Quick as a flash Tarquist broke off his excited shouting to Humphrey and whirled around. He whipped out his pistol and leveled it at Langley.

"All right," he said crisply. "Come on out here. It's time you learned what I am doing, anyway."

Langley slowly approached. He stared in stupefaction at the weird setup. Humphrey calmly went on manipulating his switches and the light beams which played upon the enlarged brain.

"I am experimenting with an intelligent robot," said Tarquist. "Other scientists have made make-shift things, but I am creating one with human intelligence. That is—almost human intelligence. We are using the brain of a huge gorilla which we have stimulated to extra growth with this Almega ray. Today, for the first time, the brain shows indication of coming out of its comatose state and responding to stimuli. I have every reason to believe that our efforts at last are meeting with success. I have welded a living brain to a metal body. This will make us famous."

"But—but the experimental work here at—" faltered Langley.

"This is of far greater significance."

"You're mad!" cried Langley. "No wonder you're letting me do all the actual research while you spend your time—"

"Getting nosey like McAlpin, eh?" drawled Humphrey. "You're doing all right with the research."

Tarquist shot a piercing glance at his blond assistant, and Humphrey shrugged.

"Why have you got that—that thing under a bell jar?" Langley asked, at last understanding the reason for the heretofore unexplained cabinet of surgical instruments, why natives and possibly animals shunned this vicinity.

"Protection from the jungle," explained Tarquist, holstering his gun. "Now that you've seen my secret, come on back to the house and I'll explain things to you."

WORDLESSLY, Langley returned to the bungalow. Tarquist was brief and coldly concise. He explained that he was creating a mechanical robot which would, if successful, relieve man of all physical labor. He sounded convincing, but Langley felt that the man was mad.

He listened and nodded and veiled his true thoughts until he could have time to figure this nightmarish thing out. He went back to his laboratory work a bit shaky and jittery. For several days things went on as they had been, Tarquist and Humphrey continuing to spend their time in the jungle clearing while Langley did three men's work in the laboratory.

Then one morning Langley could stand it no longer. He suddenly made up his mind to tell Tarquist that he was through. He was going to chuck the job and go back to report to the Foundation. By staying here he only lent his support to a mad experiment which wasted the Foundation's funds.

Strapping on his revolver, Langley made his way determinedly to the jungle clearing where Tarquist and Humphrey had been since daylight. This time he didn't intend for the mad scientist to get the drop on him.

His precaution was needless. Tarquist and Humphrey didn't even know of his approach. No wonder!

As Langley parted the fern fronds before him and stared at the robot under the bell jar he became rigid with fascination. Under the force of the ray which Tarquist was directing at that huge, quivering brain the robot was stirring! One of the four steel legs was moving. It drew up and suddenly kicked against the glass of the bell jar.

"It's coming to life," shouted Humphrey.

"At last!" said Tarquist. "At last we've done it! A human robot!"

The robot's foot kicked again, and the bell jar shattered in a thousand fragments. Then, before Langley

could open his mouth, a pair of the segmented tentacles whipped out and circled like a noose about the necks of the two scientists. Tighter and tighter the coils constricted—until two tongues popped out of blood-congested faces, two pairs of eyes bulged horribly and then—*plop!* Two heads rolled to the ground.

Langley recovered himself in time to level his gun. He poured shot after shot into that quivering brain. The robot seemed to shudder. Its tentacles went limp, letting the two headless corpses drop to the ground. Then it swayed on its stand, toppled, and crashed headlong into the bank of electrical machinery, taking the whole mass to the ground in ruins.

Langley stood there deathly sick to the stomach. After a long period he recovered presence enough of mind to go back to the bungalow. Something Humphrey and Tarquist had said was hanging over his brain like a terrible cloud. They had called their creation —"a human robot." But they had been experimenting with the brain of a gorilla—

Langley found a spade and made his way to the lonely grave of George McAlpin. Here he sweated and was again sick as he grimly exhumed the body of his former friend. Subconsciously he was prepared for what he found, but nevertheless it was an awful shock.

BADLY decomposed, the body of McAlpin lay in the shallow grave. *But the head was missing!*

And Langley now understood. McAlpin had got in the way, and the two scientists must have murdered him and then used his brain for their ghastly experiment. And in the end McAlpin had had his revenge. What else was there for him to think? He had seen the robot kill the two scientists. Perhaps George McAlpin, wherever he was, was grateful for the *coupe de grace* Langley had administered.

But this was something that Langley knew he would never report to the committee at the Foundation.

Working grimly, he reburied McAlpin's body. Then he buried the horrible mess in the jungle clearing. This done, he packed a knapsack, took his gun, and set out downstream along the river. He was going back to civilization—and away from Tarquist's Station Death.

•

COMING NEXT ISSUE

A Complete Book-Length Novel of the Forgotten Centuries

TWICE IN TIME

By MANLY WADE WELLMAN

PLUS MANY OTHER SCIENTIFICTION STORIES AND FEATURES

•

ROMEOS

Don't let your love-making be spoiled by a cough due to a cold . . . Keep Smith Brothers' Cough Drops handy. Black or Menthol, just 5¢.

Smith Bros. Cough Drops are the only drops containing VITAMIN A

Vitamin A (Carotene) raises the resistance of mucous membranes of nose and throat to cold infections, when lack of resistance is due to Vitamin A deficiency.

SCIENCE Question BOX

WILL THE SUN DIE?

Editor, SCIENCE QUESTION BOX:

Isn't it true that our sun squanders its mass and energy at an incredible rate? If such is the case, won't the sun inevitably lose all its internal energy and become a dead star?—M. K., Garden City, Long Island, N. Y.

Our sun weighs several hundred billion tons less today than it did at the same hour yesterday. An ordinary 40-watt electric light would radiate in two million years, if it could tap sufficient stores and persist, only one ounce of energy; the sun, in a single second, radiates from its surface the spectacular total of four million tons! Only a very small fraction of this radiation, about 160 tons a day, reaches our Earth. In a year's time, the sun lavishes 130 million million tons into space, without any apparent adequate source for replenishing this great loss.

The sun, while it has many millions of years of life ahead of it, appears to be dying off slowly as a luminous body because of this active radiation. It is much smaller today than it was when life first appeared on this planet. Nor is the sun alone in this wasteful dissipation of its resources. All the stars appear to be radiating away continually their tremendous inheritance of heat and energy. Slowly, but surely, they are burning themselves out.

The sun's great loss of weight by radiation and by violent sunspot activity since its birth at some remote period in the dim corridors of time is almost inconceivable. Sir James Jeans has calculated that the sun, many billions of years ago, must have been **one hundred times as heavy as it is now.** And if the solar orb continues to expend its energy at the present rate, Jean adds, at the end of about 15 million million years it will be radiating away its last ounce of weight!—Ed.

THE WORLD IS ROUND

Editor, SCIENCE QUESTION BOX:

Have we any proof that the world is round, other than the fact that man has been able to circle the globe?—E. V., San Diego, Calif.

To a spectator so placed as to have an unobstructed view in all directions, the Earth appears a circular plain on whose circumference the vault of heaven seems to rest. In ancient times even philosophers looked upon the Earth as a flat disc swimming upon the water. But many appearances were soon observed to be at variance with this idea, and even in antiquity the curved form of the Earth began to be suspected.

It is only by assuming the Earth to be curved that we can explain how our circle of vision becomes wider as our position is more elevated, and how the tops of towers, mountains, masts of ships, and the like, come first into view as we approach. There are many other proofs that the world is a globe. Thus, as we advance from the poles toward the equator, new stars, formerly invisible, come gradually into view; the shadow of the Earth upon the moon during an eclipse is always round; the same momentary appearance in the heavens is seen at different hours of the day in different places on the Earth's surface; and lastly, since 1519 the Earth has been circumnavigated innumerable times.—Ed.

CONTROLLING THE WEATHER

Editor, SCIENCE QUESTION BOX:

I know that meteorologists can foretell with fair certainty the variety of weather that lies ahead of us for the following forty-eight hours. But can science control the weather, make rain fall at will, etc.—H. G. G., Pittsburgh, Pa.

Ever since Noah predicted the deluge and his skeptical neighbors laughed at him, man has talked and worried and investigated and tried to do something about the weather. Tens of thousands of weather almanacs, the work, for the most part, of quacks and charlatans who profess to see exact weather formulas in coincidences of certain natural phenomena and the motions of the planets, are still sold to deluded purchasers. Savages in odd corners of the earth continue to practice weird rites which they believe will persuade the gods of the atmosphere to produce the desired weather conditions.

Although most scientists remain doubtful, modern inventors are concentrating their efforts as never before on the development of some device which will influence weather conditions by changing the delicate balance in the atmosphere. One scheme proposed for making cooler weather in summer is to add more nitrogen gas to the 80 percent of it ai-

(Continued on page 121)

In this department the editors of STARTLING STORIES will endeavor to answer your questions on modern scientific facts. Please do not submit more than three questions in your letter. As many questions as possible will be answered here, but the editors cannot undertake any personal correspondence. Naturally, questions of general interest will be given the preference. Address your questions to SCIENCE QUESTION BOX, STARTLING STORIES, 22 West 48th Street, New York City.

Thrills in SCIENCE

Thumbnail Sketches of Great Men and Achievements

By MORT WEISINGER

MOLECULE HUNTER

IF the great hero Hercules, sitting on some lofty pedestal in fabled Mt. Olympus, were to have gazed down upon tiny Earth in the year 1909 and watched the efforts of one Jean Baptiste Perrin in the laboratory, he would have been amused no end. Amused—because even Hercules would have despaired the giant quest Perrin had set for himself.

Jean Perrin's quest was to hope to count the billions of molecules abundant in a single cubic centimeter of gas!

Truly, that was a task for a superman! But Jean Baptiste Perrin, like so many of his persistent French fellow scientists, didn't mind wrestling with the impossible. More important, he had the conviction of his ideas. So he decided to dedicate some of the best years of his life to the seemingly hopeless search for an exact census of the molecules in a given quantity of gas.

We should go back one hundred years, to the great chemist, Avogardo, for the story of Jean Baptiste Perrin. Avogardo, as a result of countless experiments with gases of

Avogardo

all varieties, had given one immortal statement to the scientific world: "Equal volumes of all gases under the same conditions of temperature and pressure contain an equal number of molecules."

Mathematicians had verified Avogardo's hypothesis. But no one had ever tested it by actual experiment. And that was what Jean Baptiste Perrin hoped to accomplish. He would see whether equal volumes of all gases really contain the same number of molecules. How? By actually counting the molecules—one by one!

The immensity of the job would have staggered a corps of the most qualified physicists in the world. But not Perrin. He proceeded about the quest in workmanlike fashion, tackling the entire problem as if it were some algebraic puzzle with the solution begging for an answer.

First, Perrin decided to work on the premise that the distribution of fine grains of matter act like that of an atmosphere under the action of gravity. In other words, different pressures would have the same effect on fine grains as they did on the molecules in gas.

Perrin decided that he would have to work with the finest grains of matter known to man. He tried colloidal solutions of arsenic sulphide, ferric hydroxide—but they weren't of any use.

He needed grains so fine that in an emulsion they would all be of equal size, would not clot together. Finally, after weeks of trial and error, he was able to prepare, from the gum gamboge, the finest powder in all the world.

Perrin gazed speculatively at the superfine powder. Now he could go to work. The grains of powder had to be made uniform in size. So he suspended a weighed amount of them in water, centrifuged them, had them rotated at terrific speeds. He distilled, fractioned, and finally, after three weeks, the heavier particles of the powder had settled to the bottom of the water. Only the most minute grains remained as residue, suspended in the water.

Working with the finesses of a master technician, Perrin transposed a drop of wa-

ter containing the fine gamboge powder on a slide under a powerful microscope. An intense beam of light illuminated that drop. Now every time one of these bits of matter —about a micron in diameter—passed across the field of his microscope, Perrin saw a momentary flicker of light.

Perrin counted these flashes for hours and hours and days and days. One by one, by the ten thousands. And all in one drop of water, subjected to a calculated pressure.

Perrin counted and counted so much he would have worn out a dozen adding machines. Then he got an idea. The counting of the grains was highly tedious, particularly when they were all agitated by the Brownian movement. So Perrin decided to take a series of instantaneous photos. He would count the sharp images of the grain on the plates, at his leisure.

Mind you, that was leisure for the man, compared to his other method of counting them.

And so Perrin kept on. Finally, he was done. He had counted all the fine grains of this almost invisible powder suspended in one drop of water. Now he made his calculations. He had weighed the powder he had put into the water, knew exactly how much he had not used, and had counted the grains. If you knew how many grains were in 1 volume of gas, you could multiply and figure out how many were in a greater volume. So, Perrin concluded after a time, the number of molecules in a cubic centimeter of gas was 31,500,000,000,000,000,000,000.

But Perrin wasn't done yet. Not by any means. He had to check and recheck. He had to work with other solutions. He suspended powder in alcohol, in a dozen other liquids. And the results were always the same! He had proved, by indefatigable research, the hypothesis of Avogardo!

Hercules himself couldn't have bestowed a better reward to Perrin than did humanity. For, because he was the first man to show us that a tiny, half a test-tube full of gas contained thirty billion, billion molecules, Jean Baptiste Perrin was awarded the Nobel Prize in physics!

THE EIGHTH PLANET

JOHN COUCH ADAMS was broke. He didn't own a dime in the world. His entire earthly possessions consisted of the drab, patched suit he wore and the thick bundle of manuscript pages he held tightly under his arm.

And now he saw the big chance of his life slowly ebbing away from him. For he had failed to convince the great Sir John Airy, the Astronomer Royal.

John Couch Adams smiled wanly. He was a slender, mild-mannered man, with blue eyes. Well, at least he would go out with colors flying high. It wasn't everyone who had the chance to insult the Astronomer Royal.

He took out a cheap, wooden snuff-box,

John Couch Adams

in contrast to the ornate, silver one on the astronomer's desk.

"Here, Sir John," he said in mock politeness, "maybe some of this will help clear your head."

Sir John Airy, a portly, middle-aged man, got up wrathfully.

"You are impossible, Mr. Couch! One cannot argue with you. I talk with facts. What facts have you to support your statements? I have tried to be tolerant, but—"

John Adams Couch tapped the bundle of manuscript pages at his elbow. His eyes lost their mildness, became angry.

"Facts? These papers offer eloquent proof. Proof which you and your pig-headed associates refuse to recognize. What more can I say?"

"Look, my friend," Sir John said softly. "How did Louis Pasteur discover the microbe? With a microscope! How was our great Sir Isaac Newton able to analyze light? With the spectrum!"

"So?" asked Adams quizzically.

"So!" roared Sir John. "So how can you have discovered a new planet without a telescope? Did you look into a crystal ball?"

John Adams stepped forward, looked straight into the astronomer's eyes.

"Sir," he said, "I am a mathematician. Mathematics is a pure science. And according to my calculations, an eighth planet exists in our Solar System. If you will be good enough to train one of the expensive but little-used telescopes at your observatory in the region of the heavens I have indicated—you will find it!"

But Sir John Airy was already opening the door for Adams.

"Good day, Mr. Adams. You are mad. Leave the planets to the astronomers. We

will leave the fact that two and two makes four to the mathematicians!"

John Couch Adams exited gracefully. But once outside his smile melted quickly and froze into a wry grimace. For it was raining heavily in the street. And here he was, stranded in London. And without a job.

As he stood in the doorway, his shivering form huddled against the corner, his thoughts were bitter. Years of work in vain . . . he had toiled for naught. Those papers under his arm. He could not even use them to build himself a fire. They were wet.

There must be an eighth planet beyond Uranus, Couch told himself for the thousandth time. For the revolution of Uranus around the sun, as reported by all astronomers, was an unusual and baffling one. It never seemed to be moving as it should. But he knew the answer. Some unknown, distant planet was pulling it out of its path. That was the cause for the disturbance in Uranus' movements. And he had figured out where Planet Unknown was!

But no one would listen to him. He was too young and too poor. If he only owned a telescope! He'd be able to find the planet himself.

The pelting rain roused John Adams back to reality. He turned about to give the residence of the Astronomer Royal one last, rebellious look, sighed wistfully, and walked out into the night.

As the torrents of rain swept over Adams, and as the pangs of hunger clutched at his stomach, the young mathematician looked upward, shook his fist at the starless sky.

"Damn mathematics!" he swore. "And blast all science. What's the use?" And John Couch Adams vowed to forget about Planet Unknown.

But the workings of fate are strange. While Adams' great work—a work so tremendous that before it the mightiest astronomers would have quailed—was disregarded, the great French mathematician Le Verrier was persuaded to try his hand at solving the mystery of Uranus' eccentric orbit that very autumn, in the year 1846.

Le Verrier worked hard at the problem, and he, too, came to the same conclusion as had Adams—that a distant, undiscovered planet was the cause of it all. The gravitational effect of an eighth planet caused the perturbations in the orbit of Uranus.

Le Verrier was famous. When he said something, it was front-page news. His views obtained immediate recognition. Being a man of energy, Le Verrier wrote to Professor Galle, of Berlin, asking him to turn his telescope to a certain spot in the heavens on a certain night.

"You will find a new planet there," Le Verrier predicted—as had Adams.

Professor Galle shrugged his shoulders when he received the communication. Well, it was a waste of time, but he'd humor the great mathematician. So the professor focused the eyepiece of his telescope at the spot indicated by Le Verrier's calculations. The rest is astronomical history.

A new planet was discovered at that exact region in the sky . . . the planet Neptune!

John Couch Adams' thrill in life was to come. The man who had been right, but too early, was made a professor of mathematics at St. Andrews. Later, he was awarded the Lowndean Chair of Astronomy at Cambridge University.

John Couch Adams had achieved the impossible. He had discovered a new planet—without a telescope!

THE CAMERA NEVER LIES

SAM BREWER held out a fist full of silver dollars before his friends, jingled the coins noisily.

"I'll bet fifteen to one Confederate wins this race!" he cried. "Any takers?"

The small group of men were silent. Finally one man spoke.

"You'd bet on anything, wouldn't you, Sam?" he said, amusedly.

"If I think it's a sure thing—yes!" Sam Brewer was quick to qualify.

"Well, I won't bet you on Confederate. Everyone knows he's the fastest horse here in California. Why, I'll bet he travels so fast all his feet leave the ground at the same time.

Suddenly, there was the explosive sound of a shot. The race had started. The horses were off!

The group of men leaned tensely against the fence, their eyes following the favorite, Confederate. The stallion raced by with incredible speed, outdistancing all the other horses by several lengths. Reformer, a brown filly, spurted ahead for a few brief seconds, then fell back with the others. Confederate galloped in easily, a winner by a mile. The race was over.

Sam Brewer turned to his companion.

"I'll take that bet," he said.

"What bet?" asked the other, puzzled. "I didn't make any bet."

"Sure you did," insisted Sam Brewer. "You said that Confederate travels so fast its feet are off the ground at the same time. I think that's impossible. So I'll bet you—and give you two to one odds!"

Sam Brewer's companion scratched his forehead. He thought for a moment, then grinned.

"All right, I'll take the bet," he said. "But how are you going to prove it? How can we determine if the horse's feet are ever off the ground at one time?"

Sam Brewer put his jingling silver coins into his trousers pocket.

"You've got me, pal," he said. "I can't prove it. But neither can you!"

A tall, dark-haired man interrupted. He had been listening carefully all along to the conversation of Brewer and his companion.

"I don't know but that that bet can't be proved, Sam," he said quietly.

Sam Brewer looked up in astonishment, then laughed.

"How are you going to prove it, Edward Muybridge? Ask the horse?"

Edward Muybridge shook his head.

"No! By photography!"

Edward Muybridge's statement consisted only of three words. But it wasn't as simple as it sounded. For, while a camera could help him obtain a still picture of a horse in motion, the odds were thousands to one that he would be able to click the shutter at the precise moment when the horse's feet left the ground—if they did.

Yet Muybridge sensed that in that magic art—photography—was locked the solution to Sam Brewer's bet. But how to utilize the camera to arrest the motion of a racing horse in flight?

The problem fascinated Muybridge. He thought about it, dreamed about it. And the more he thought about it, the closer he came to the answer. He built himself a photographic studio near the racetrack. Then one day he got an idea.

"Let us place a 'battery' of cameras—about twenty-four of them—right next to each other," he told his assistant. "We'll arrange these cameras side by side in a line parallel with the race track. We'll have a thin thread connected to the shutter of each camera—and this thread will stretch taut across the track. When a horse will come racing down the track he will intercept these tiny threads. Each time he touches one of them, it will release a spring that will snap the shutter of the camera. Then, we'll have a series of photographs of the horse in motion—but each photograph taken a slight fraction of a second later than the other. By putting them all together we'll have—"

Muybridge's assistant nodded.

"I see. When the horse comes galloping down the track, it will pass each camera. and break the thread holding the shutter. It will actually be taking its own picture!"

Muybridge's eyes glinted. "That's the principle behind the idea—and I hope it works."

Muybridge labored zealously to set up his battery of cameras, with the arrangement of threads. Finally, he was done. The day for the test—a morning in 1872—had arrived. Muybridge sent for Sam Brewer and his friend.

"Well, Sam," he began, "I'm going to prove that bet you made, one way or the other. We'll see who's right with these cameras—I hope!"

A horse was recruited from one of the stables. The jockey was instructed to race it past Muybridge's armada of cameras.

All held their breaths as the horse came thundering down the sod, flew right past them. There was the *snap—snap—snap* of the two dozen clicking cameras as the horse broke the treads in his path.

The twenty-four cameras, each numbered in order, were carried back to Muybridge's studio. Sam Brewer was still confident of his wager.

"I'll still give two to one I'm right," he said cheerfully. No one took his bet. All were too interested in the outcome of Muybridge's device.

Edward Muybridge

The developing of film wasn't such a swift process in 1872. You had to wait hours for the films to be ready. The men waited impatiently. Muybridge smoked incessantly. Soon he would know whether his experiment was a success. Eventually the pictures were developed. Muybridge called the men over.

"Look, friends," he said calmly as he placed the twenty-four pictures alongside each other. "These pictures—taken apart from each other at intervals of the merest fraction of a second—clearly show a whole series of photographs of the horse in motion. And we can see—because the camera never lies—that all the horse's feet are off the ground at one time. Study the five photographs at the left."

Edward Muybridge turned to Sam Brewer.

"You lose your bet, Sam," he said.

Sam Brewer looked at Muybridge in astonishment.

"Sure I lose my bet," he declared. "But what's the matter with you? Aren't you thrilled? You're the first man ever to have made moving pictures!"

Edward Muybridge tried to speak. But there was a lump in his throat. Suddenly, he realized that he was thrilled. A very great deal. He had something to be thrilled about.

GUINEA PIG, PH. D.

By ALFRED BESTER

Author of "The Broken Axiom," "No Help Wanted," etc.

There was a split-second rush of kaleidoscopic colors before my eyes

All Life's Secrets Are Revealed on Dr. Winters' Lab. Tables—But Then the Tables Are Turned!

"GOOD afternoon, ladies and gentlemen. This is Psychology 102-A, Tuesday and Thursday afternoons from two to five. It is a course designed to supplement your advanced work in physiology and will consist of two lectures and four lab hours per week.

"Permit me to introduce myself. My name is Winter. W-I-N-T-E-R. Write it down in your note books if you can't remember. Since I am only an assistant professor, you cannot call me 'Prof', but in view of a trifling thesis I wrote last year, you may properly call me Doctor. Probably some of you will refer to me by other names before the semester is over. . . .

"Thank you. But let me remind the class that although I am young, I am not gullible. Four or five years ago, I too was trying to laugh my way into an 'A', and I remember all the tricks. This is not a snap course, ladies and gentlemen. You'll have to do more than laugh at my weak jokes.

"You are intrigued, I hope, with the beautiful display of apparatus and creatures on the lecture table. These are the tools with which we shall work. We are engaged in investigating the capacity for learning in the

lower forms of life. Now, as an introduction to our course, let me give you a preliminary outline of what we shall do.

"There are certain life-forms that are able to modify inborn conduct to prevailing circumstances. The spider and the bird are excellent examples. The spider builds his web according to an instinctive formula. Each species spins its own particular type web, but the minor details depend on just where the spider happens to begin construction. The insect will modify its plan to suit the site.

"Birds, too, build their nests according to a plan characteristic of the particular species. Here again you will find that not only does the bird modify the nest according to the site, but to the materials at hand as well.

"Now many people attribute such phenomena to the thinking powers of the creatures. This is merely optimistic idealism. Don't fear the ant's intelligence. He will never conquer the world. These operations which seem to be intelligent—that is, thought out—are derived solely from instinct. The variations which we observe are merely the plasticity and flexibility of set, inborn instincts.

"WE shall continue with our research to learn that some animals exhibit the phenomenon of memory. But this is not at all amazing. Memory is no sign of intelligence, in fact it may even be exhibited by colloids. Don't wriggle in your seats, it's quite true. The manner in which a colloid has been created governs its future reactions to reagents. This is no more nor less than memory.

"Now protoplasm is essentially colloidal in composition, and consequently it too, exhibits memory. This glass tube, shaped like a 'Y' with a very long stem, is a testing chamber for earthworms. The subject crawls along until it reaches the fork. If it turns to the right—well and good. If it turns to the left, it receives a mild shock from the wire attached.

"After a few hundred attempts the rather stupid worm learns to keep to the right. 'The worm learns!' you cry. Not so. For if we excise the minute brain, we discover that the organism, now no more than a mass of protoplasm still keeps to the right. In fact you may excise beforehand and the brainless mass will still learn to keep to the right.

"No—fiction writers to the contrary notwithstanding—we have little to fear from the animals. Their learning capacity is far behind ours. We, from one isolated experience, can deduce either a series of answers or a general hypothesis. The animal cannot. We can comprehend, itemize and classify. The animal cannot.

"Here, for example, is a tank of crayfish. Ostensibly, to them, it is a natural and happy home. To us, of course, it is merely a reservoir of experimental subjects. Presently I shall remove one of these crustaceans for an experiment. Not only will the remainder fail to notice the loss, they will even fail to observe the intrusion of the tongs.

"In other words, the lower forms cannot recognize a phenomenon from its secondary manifestations, as can the human. They must have such matters thrust directly upon them for awareness. Roiled waters mean nothing to them. They must have the metal smite them on the head.

"I seem to have mislaid those much-talked-of tongs—Ah, here they are. And now, before I dip into the tank for our first experimental subject, may I leave with you an idea that will bear much contemplation. There are many of us, ladies and gentlemen, who differ not at all from the crayfish. These are the people who will not be cognizant of the thunderstorm until they are struck by lightning. . . ."

* * * * *

THE students roared again as I turned. It was a good class, I thought, and would probably turn out well. Their laughter sounded quite sincere and I knew that despite my assumed dry curtness we would get along through the semester. There is nothing more encouraging to a young instructor than good-humored students, and those chuckles had a very satisfactory ring to my ears as I

reached to pick up the tongs. . . .

Then the sound abruptly ceased. There was a split-second rush of kaleidoscopic colors before my eyes. My heart suddenly began knocking against my ribs as I realized that something was terribly wrong.

I still stood, feet firmly planted to the ground, one hand outstretched, but around me whirled the maddest, most fantastic riot of insanity that I had ever seen. The lecture amphitheatre, the familiar sights and sounds of Harrison Laboratory, the dull murmur from the streets—all had disappeared. In some strange fashion I had been transferred, in the barest fraction of a second, from reality to chaos.

I lowered my arm slowly. And then, thinking that perhaps my eyes had betrayed me, called out loudly, hoping to hear the surprised answers of the students who should have been seated behind me. My voice sounded flat and dead, as though I were shouting in a room with padded walls.

I sucked in my breath and screamed once again—screamed until my throat ached. Only dead, unearthly silence answered. I could feel my chest heave with nervousness and fright. I realized that my finger nails were biting into the palms. I was trembling.

And the madness of those colors! They swirled and danced before me like an idiot dancing in the wind. They bowed and nodded, heaved and contracted like some great flame whipped by a hurricane. There was nothing but color all around me—above, below, on all sides—and it seemed alive! It writhed and gesticulated with life.

My stomach heaved. It was the same sensation I had when a swiftly moving elevator slowed abruptly. And I realized I must have been traveling through the weird space at breakneck speed. I hung poised then. I could sense the pause, the loss of motion. And still there was nothing but that evil dance of spangled darting color around me. It curled and eddied, like gusts of smoke in a draughty room.

Then a great white tendril approached with the rush of an express train. It pushed up through the curling, vivid splashes. It was followed by another. Swiftly, but gently, they curved themselves around my waist and held me in a firm, almost crushing grip. I was too frightened to wriggle. I sagged against the hard, dead white and noted absently that it was metallic. It glistened with a strange luster.

There was a soundless rush of the dancing mists and I was conscious of a swift flight toward a distant speck that loomed toward me. It was bright blue, and as it grew, I could see many sparkling facets glisten from the nucleus toward a rim that spread before my eyes until it was lost far in the distance on either side.

The speck burgeoned to a great disc and at last to an infinite-reaching wall as I lost sight of the edges. And then there was the heave in my stomach again as my motion halted, and I was conscious of a dreadful scrutiny.

IT came over me, then, suddenly, that I was being inspected by that great eye. I remembered, for some strange reason, the way we in the laboratory used to select an experimental subject and examine it closely for possible injuries before setting it to work.

I hung in the air, grasped by those two white cables and felt that the wall of blue was probing into my very soul. I tried to collect my thoughts.

I had been lecturing to my class, and in the smallest fraction of a second, I had been transported to a chaos of colors. It seemed almost as though I had gone stark mad, and was seeing the normal world with the eyes of a maniac. I peered intently at the great blue disc and then at the swirling clouds of colors behind me. I could sense great, huge f o r m s drifting majestically about, moving so slowly that they gave me a premonition of foreboding.

I wondered if what I saw was merely a secondary manifestation of some enormous super-being almost beyond the ken of my senses. Some superscientist who was using me for his guinea—guinea pig! Earthworm! My head snapped up and I was tense with the first reasonable clue.

The idea seemed fantastic, much too ironic to be plausible. And yet, I could

(Continued on page 124)

NEXT issue—the first time-traveling novel ever to appear in STARTLING STORIES! It's by far the most fascinating theme in scientification, and Manly Wade Wellman has used it as a basis for his greatest story—TWICE IN TIME. We invite you to accompany us on a thrilling excursion into the centuries of yesteryear as Manly Wade Wellman unveils the secrets of forgotten yesterdays.

Behold the age of Leonardo Da Vinci, scientific wizard of the Renaissance, as a scientist's time projector hurtles a mortal of today into the realm of the past. See history in the making!

TWICE IN TIME is illustrated by Virgil Finlay. Mr. Finlay, an authority on Florentine art, has expertly captured the spirit of that period in his drawings. You'll find his illustrations for TWICE IN TIME as exciting as the times they depict.

Another Weinbaum Masterpiece

Other fine short stories by master writers in the May issue of STARTLING STORIES. The nomination for the HALL OF FAME—your nomination—is the sequel to Stanley G. Weinbaum's great masterpiece, "A Martian Odyssey."

This sequel, VALLEY OF DREAMS, is as outstanding as its predecessor. It's the second story ever written by Weinbaum—one of the stories that helped mold his fame and reputation as fantasy's ace writer.

All our regular scientifictional features in the next number. P. Schuyler Miller writes the guest editorial. Jack Binder tells the life of Thomas Alva Edison in pictures in his popular feature, THEY CHANGED THE WORLD. And you'll find new THRILLS IN SCIENCE, another Scientific Crossword Puzzle, plus other interesting departments. Top fiction, features and fact in the magazine that's tops!

Our Companion Magazines

There's a long, complete scientifiction novel, published complete in a special scientifiction section, in every issue of THRILLING WONDER STORIES these days! Are you following these classics? These feature novels are by such famous authors as Eando Binder, Frederic Arnold Kummer, Jr. and Oscar J. Friend.

Consult the current issue of THRILLING WONDER STORIES for a looksee at the grandest and best monthly scientifiction magazine in the field. Excellent stories and features in every number. Hitch your wagon to our star-parade!

Captain Future

Thanks for your enthusiastic response to our newest companion scientifiction magazine, CAPTAIN FUTURE! With its very first issue this newly launched fantasy magazine climbed right to the top of the ladder.

Those who have already read the first issue will be pleased to learn that the second number of CAPTAIN FUTURE will shortly appear. And those who haven't already made the acquaintance of this great magazine had better do so now!

We'd appreciate your dropping us a line and letting us know what you thought of Edmond Hamilton's complete book-length novel, CAPTAIN FUTURE AND THE SPACE EMPEROR. —The Editor.

THE ETHER VIBRATES—with the letters sent in by loyal followers of science fiction. Add your voice! This department is a public forum devoted to your opinions, suggestions and comments—and we're anxious to hear from you. Remember, this is YOUR magazine and is planned to fulfill all your requirements. Let us know which stories and departments you like—and which fail to click with you. A knock's as welcome as a boost—speak right up and we'll print as many of your letters as possible. We cannot undertake to enter into private correspondence. Address THE ETHER VIBRATES, STARTLING STORIES, 22 West 48th St., New York, N. Y.

LETTERS FROM READERS

RANKS WITH LEADERS

By Al McGrew

Since I haven't had the experience of writing to a magazine as yet, I hope that you will not expect too much.

My only comment on STARTLING STORIES is that it could hardly be improved. Each issue seems to better the preceding one.

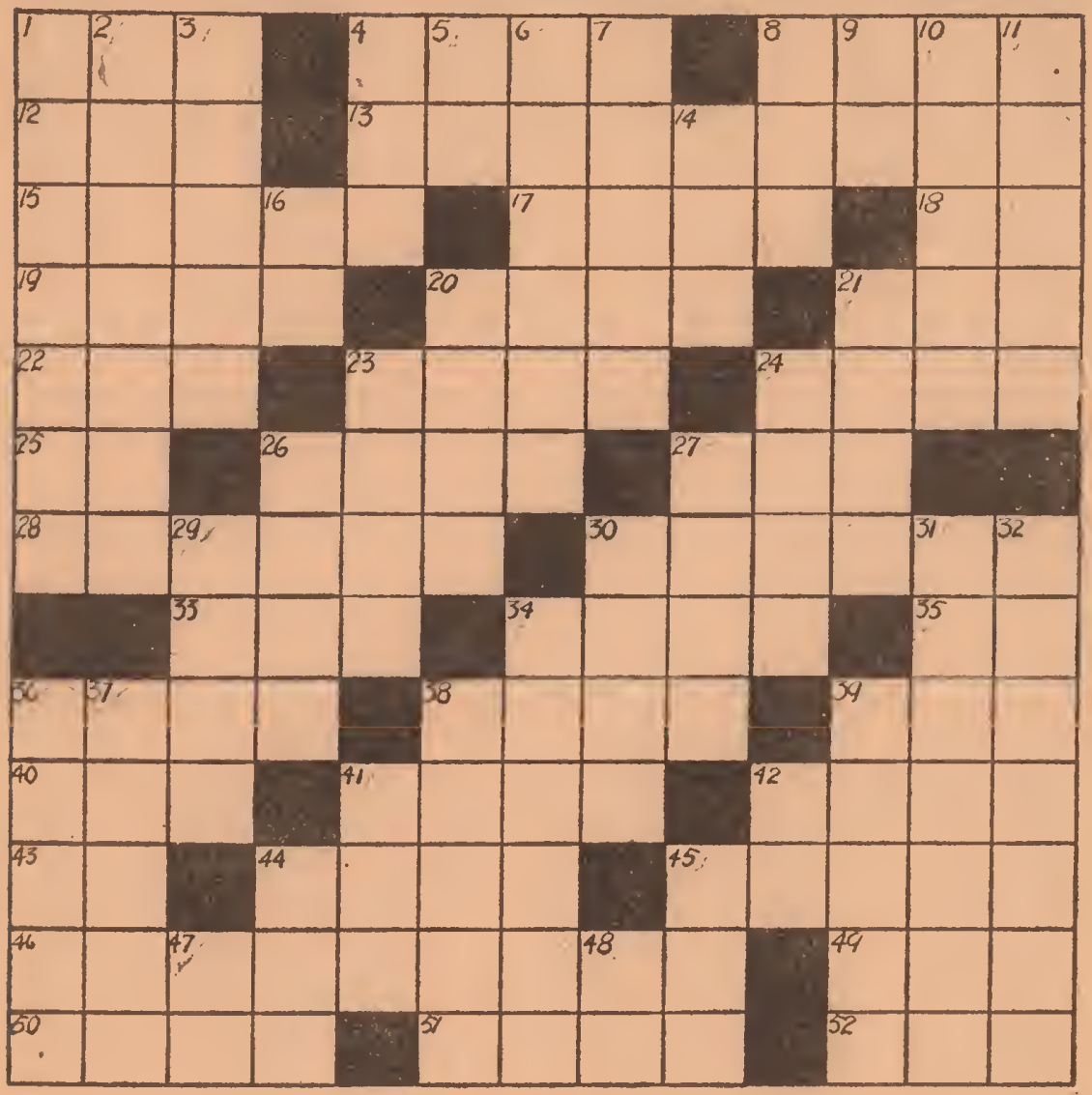
But as far as the authors and their creations are concerned none could outshine the other. In my opinion Stanley Weinbaum outdistances them all as far as writing is concerned. I will never forget his story, the "Black Flame." I have read it many times and get something new out of it each time.

Jack Williamson's latest, "The Fortress of Utopia," ranks with the leaders.

I don't have to mention "A Martian Odys-

(Continued on page 122)

SCIENTIFIC CROSSWORD PUZZLE



ACROSS

1. Non-circular rotating piece, to give reciprocating motion.
4. Blood relations.
8. Benzene di-derivative in which the substituted atoms are directly opposite each other on the benzene ring.
12. Military aviator who has brought down five enemy airplanes.
13. Extract from a suprarenal gland, used in medicine as a heart stimulant.
15. Ornamental flowering shrub having fragrant purplish flowers.
17. Dye-indigo.
18. Perform.
19. Scent.
20. Watery vapor in a state of suspension in the atmosphere near the earth's surface.
21. Layer in a mass of stratified rock.
22. Japanese copper coin.
23. Part of skeleton.
24. Evolution of heat and light by combustion.
25. Pronoun.
26. Depression between two mountains (pl.).
27. Four quarts (abbr.).
28. Cover of the eye.
30. Pertaining to the north wind.
33. Alkaline earth metal (abbr.).
34. Astringent mineral salt.
35. Metallic base of alkali soda (abbr.).
36. Dull whitish tint.
38. Native of Scotland (abbr.).
39. And so forth (abbr.).
40. Operculum.
41. Encounter.
42. Long narrow piece of wood or metal.
43. Precious metal (abbr.).
44. Regulated course of eating and drinking.
45. Portion of a spiral formed by a single revolution about the central point.
46. 1,000,000,000,000,000,000,000,000,000,000.
49. Evergreen Chinese or Japanese shrub.
50. Fall in drops.
51. Boat with a flat bottom and square ends.
52. Engineering Scientific League (abbr.).

DOWN

1. Amount of heat required to raise one gram of water one degree centigrade.
2. Degree of acid strength.
3. Trailing plant of the gourd family.
4. Membranous pouch.
5. Unit of germ-plasm in Weismann's theory or heredity.
6. Organ of mental power (pl.).
7. One of the faculties by which man perceives external objects by means of impressions made on certain organs of the body.

8. Branch of biology that treats of fossil organic remains (abbr.).
9. Element remarkable for lightness and resistance to oxidation (abbr.).
10. Light weight set astride a balance-beam for determining very small differences of weight.
11. Positive voltaic pole.
14. Egg of a louse.
16. Argent (abbr.).
20. Fungus growth on food.
21. Secretion of the liver.
23. What you do to water to eliminate dangerous microbes.
24. Tract of land under one control devoted to agriculture, stock-raising, etc.
26. Hydrous aluminum silicate.
27. Disease manifested by inflammation of a joint.
29. Habitat plant form due to origin by adaptation.
30. Spot of ink.
31. Brightest star in the constellation Scorpio.
32. Pertaining to milk.
34. Relating to vinegar.
36. Organ by means of which constituents are removed from the blood.
37. Stiffness.
38. Closes the eyes of by threads drawn through the lids.
39. Choicest part.
41. Unit of length in measuring the diameter of wire.
42. Country in south-west Europe (abbr.).
44. An attitude other than horizontal of strata.
45. Stellar Navigation Ways (abbr.).
47. Element almost always found associated with cobalt (abbr.).
48. Egg (combining form).

The solution is on page 123—if you MUST Look!

SCIENCE QUESTION BOX

(Concluded from page 111)

ready in the air. In Russia, several years ago, engineers constructed a huge tower which was to prevent snowfall by sending out large quantities of electrical energy. But snow has been falling as usual in Moscow. Undiscouraged by their lack of success, Russian engineers are now experimenting with artificial rain-making in the arid deserts east of the Caspian Sea.

Man's dream of creating artificial weather may not be futile fantasy forever, though. Some attempts to dispel fog and clouds to create rain by electrical precipitation have enjoyed sufficient success to encourage the hope that a measure of control over the weather may not be a chimera. By shooting droplets of concentrated calcium solution into the air, engineers at M.I.T. have discovered that they can force the small water droplets in a fog to collect into larger drops, which will then precipitate as rainfall. If the apparatus can be perfected, and sufficient funds are provided for its operation, it may be possible eventually to clear paths through the fog at the entrance of busy harbors and at airports, thus removing, at least partially, one of the worst nightmares of aviators and mariners.

Another experiment for making rain out of fog by scattering sand particles bearing negative electric charges from airplanes was carried on at Cornell University, but the measure of success attained was very small and entirely out of proportion to the cost involved. Manufactured rain, it was found, would literally cost its own weight in gold.—Ed.

Try this *cooler* SHAVING CREAM at our expense

20 SHAVES

FREE

We won't ask you to read a lot of weighty arguments aimed to convince you that Listerine Shaving Cream is superior to others. We'll rest our case on the cream itself. We want you to try it at our expense.

One little dab of it on the face, whipped into a cool, creamy lather, will do more to convince you of its merit than a whole page of arguments.

If twenty free shaves do not remove all doubts of its superiority, nothing will.

It has been our experience that when a man gives Listerine Shaving Cream a thorough trial, he rarely returns to other brands—good as they may be. Possibly you will be an exception. We hope not.

It costs you nothing to learn the secret of cooler, quicker shaving. Simply clip the coupon below and put it in the mail. Tear it out now before you forget it. In return for it, you will receive a generous trial tube of Listerine Shaving Cream—enough for at least twenty shaves.

When that tube is empty, you will probably want the regular size tube. What a whopper of a tube it is . . . containing at least 130 shaves! Some men get as much as 175. What a whale of a bargain at 35¢!

All drug counters have it, as well as the new Listerine Brushless Cream. LAMBERT PHARMACAL CO.

CLIP THE COUPON

LISTERINE SHAVING CREAM

20 SHAVES FREE

Lambert Pharmacal Co., Dept. 150, St. Louis, Mo.

Please send me free and postpaid your large sample tube of ☐ Listerine Shaving Cream; ☐ Listerine Brushless Cream. (Check whichever is desired.)

Name_____

Address_____

City_____ State_____

Pile Sufferers! Attention

The McCleary Clinic, 397 Elms Blvd., Excelsior Springs, Mo., is putting out an up-to-the-minute book, everyone should have on this and related ailments. You can have a copy of this book by asking for it on a postcard sent to the above address. No charge. It may save you much suffering and money. Write today for a free copy.

WORLD'S LARGEST LABORATORY MAKING DENTAL PLATES ONLY!

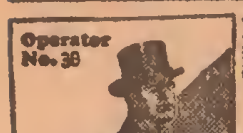
SEND NO MONEY!

TRANSPARENT PARTIAL

60 Days' Trial! ROOFLESS

We make FALSE TEETH that fit you *by mail* from *your* mouth impression. Thousands of satisfied customers. Money back guarantee. Save ½ or more. Free mouth-forms, directions. Write U.S. DENTAL CO., Dept. 3-32, Chicago, Ill.

$6.85 to $35



FOLLOW THIS MAN

Secret Service Operator No. 38 is on the job! Running down dangerous Counterfeit Gang. Yellow finger prints in murdered girl's room.

Free *The Confidential Report Operator No. 38 made to his chief. Write for it.*

Earn a Regular Monthly Salary

You can become a Finger Print Expert at home, in your spare time, at small cost. Write for confidential full report and details. Literature will be sent only to persons stating their age.

INSTITUTE OF APPLIED SCIENCE
1920 Sunnyside Ave.
Dept. 7963 Chicago, Ill.

FREE SUITS and GIFTS AS BONUS PLUS BIG PROFITS

Selling your friends fine quality, individually made to measure Suits and Topcoats at Amazing New LOW PRICES. No Extra Charge for latest Swing and Sport Styles. No Experience Necessary. Send for FREE Selling Outfit and FREE SUIT BONUS and other BONUS Offers.

JAY ROSE & CO 330 So. Wells, Dept. N.3 CHICAGO, ILL.

ASTHMA

WRITE FOR *FREE TRIAL OFFER!*

If you suffer from Asthma Paroxysms, from coughs, gasping, wheezing — write quick for daring FREE TRIAL OFFER of real relief. Inquiries from so-called "hopeless" cases especially invited. Write NACOR, 426-Z, State Life Building, Indianapolis, Ind.

Exciting Mysteries in Every Issue of

THRILLING DETECTIVE

NOW ON SALE 10c AT ALL STANDS

THE ETHER VIBRATES

(Continued from page 119)

sey" because you know how I feel toward Stan Weinbaum. You mentioned "A Valley of Dreams." Well, I'll be looking for that one most any time now, because I know everyone likes Weinbaum.

I have been reading s-f for about five years now and I think STARTLING STORIES is the best of the bunch. Those six copies are lying safely in my desk and I hope there will be six more this time next year.—Columbus, Ohio.

SEE NEXT ISSUE!
By John Cunningham

May I add my congratulations to the fine work you are doing in the science fiction field? You are to be highly complimented on the superb stories each and every issue of your magazine contains. Your November issue is no exception in fine stories. "A Martian Odyssey" by Stanley G. Weinbaum in your HALL OF FAME section is one of the best stories I have ever read in quite a while. Let's have more stories of this type.

By all means give us Stanley G. Weinbaum's sequel to "A Martian Odyssey." I am sure "The Valley of Dreams" will prove in every way its equal in entertainment as "A Martian Odyssey" has. Even if you find it necessary to exclude another short story (or make total of stories in one issue two) I am wholly sure the other readers of STARTLING STORIES will feel that they are getting their money's worth. How about it you readers!

I find that all of your book-length novels are very good and "The Fortress of Utopia" is by no means an exception. I also find that your covers are exceptionally fine in detail and well illustrated. However, your inside illustrations are even more finely done and I consider them masterpieces of drawing.

I get much pleasure and information from your special features. They are entertaining as well as informative on matters of scientific facts. As a whole I find your magazine a masterpiece of science fiction in writing and illustrations. May STARTLING STORIES long reign in the field of Scientifiction! —2050 Gilbert Street, Beaumont, Texas.

THREE CHEERS FOR "THREE PLANETEERS"
By Willard E. Dewey

I liked "The Three Planeteers" by Edmond Hamilton in the latest STARTLING STORIES immensely. It's a very good story. Plenty of action, suspense, etc. Not too much science either. The illustrations by Finlay compose the second best job contained in STARTLING so far. The best job was by Finlay, too. Let's have lots more of him.

The cover was very good, too. The story "Mind Over Matter" was only fair.

I am certainly glad that T. W. S. has finally gone monthly. Now let's have STARTLING STORIES monthly, too, and things will be just right. I haven't read CAPTAIN FUTURE yet, but it looks quite good.

I wish that you would scatter the illustrations a little more instead of grouping them at the beginning of the story. The same in STARTLING STORIES. You're doing fine.—1005 Charles Street, Everett, Wash.

ANNIVERSARY ISSUE SOLD HIM
By James Doherty

If there is a sequel to "A Martian Odyssey," let's have it by all means!

I like STARTLING STORIES more every time I read a copy. Your anniversary issue did more than anything to convince me that

BEST FUN, FICTION AND FOTOS IN

STARTLING STORIES is out of the baby stage in s-f. It is now a fully accepted member of the s-f publications, in my opinion.

Don't forget "The Valley of Dreams" by Weinbaum in an early issue.—206 Pine Street, Newport, Ark.

A VOTE FOR CAPTAIN FUTURE

By Marie Bowell

I have just read Edmond Hamilton's "The Three Planeteers" and "Captain Future." They are just swell. There aren't enough superlative adjectives in the English language to describe them.

They make us wish we could go to the airport and step on board a ship whose announcer has just called out "All aboard for Mars. Jupiter and other points on the plane of the ecliptic." Sometimes it is a little disappointing to read such thrilling realistic stories when there are no space ships. I am wondering why Edmond Hamilton and other writers of science fiction stories don't try and build a space ship and try and go into space and find out what it is really like.

No one is any more happy than I am to see that your magazine has gone monthly. Two months was certainly too long to wait for a coming issue. Also I would like the new mag CAPTAIN FUTURE issued oftener.

I wish you the best of success in the years to come.—Binghamton, N. Y.

REVIEW

By Robert Foster

I believe that there are eleven science fiction magazines in all now so you must have some pretty stiff competition. I certainly believe that STARTLING STORIES is by far the best of the eleven.

Of course, the first issue was the best of them all. Binder's "Impossible World" I enjoyed very much. "The Prisoner of Mars" was very good. "Giants From Eternity" wasn't so good. "The Bridge to Earth" was very good. "The Fortress of Utopia" was excellent. And "The Three Planeteers" was very good.

All of your covers and illustrations are very good.

I like most of your short stories and I nominate "The Messenger From Space" for the HALL OF FAME. Good luck!—9 Perry Ridge Road, Greenwich, Conn.

Answer to Puzzle on Page 120

C	A	M	■	S	I	B	S	■	P	A	R	A
A	C	E	■	A	D	R	E	N	A	L	I	N
L	I	L	A	C	■	A	N	I	L	■	D	O
O	D	O	R	■	M	I	S	T	■	B	E	D
R	I	N	■	B	O	N	E	■	F	I	R	E
I	T	■	C	O	L	S	■	G	A	L	■	■
E	Y	E	L	I	D	■	B	O	R	E	A	L
■	■	C	A	L	■	A	L	U	M	■	N	A
G	R	A	Y	■	S	C	O	T	■	E	T	C
L	I	D	■	M	E	E	T	■	S	L	A	T
A	G	■	D	I	E	T	■	S	P	I	R	E
N	O	N	I	L	L	I	O	N	■	T	E	A
D	R	I	P	■	S	C	O	W	■	E	S	L

Flush Poisons From Kidneys and Stop Getting Up Nights

Be Healthier, Happier — Live Longer

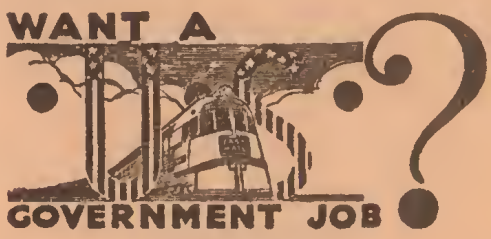
When you can get for 35 cents a safe, efficient and harmless stimulant and diuretic that should flush from your kidneys the waste matter, poisons and acid that are now doing you harm, why continue to break your restful sleep by getting up through the night?

Don't be an EASY MARK and accept a substitute—Ask for Gold Medal Haarlem Oil Capsules — right from Haarlem in Holland. GET GOLD MEDAL—the original—the genuine. Look for the Gold Medal on the box—35 cents.

Other symptoms of weak kidneys and irritated bladder may be backache, puffy eyes, shifting pains, burning or scanty passage. Don't accept a substitute.

INVENTORS

Small ideas may have large commercial possibilities. Write us for FREE book and Record of Invention form. Delays are dangerous in patent matters. Free information on how to proceed. Clarence A. O'Brien, Registered Patent Attorney, Dept. OC8, Adams Building, Washington, D. C.



START $1260 to $2100 Year

MEN—WOMEN

File Clerks
Postoffice Clerks-Corriers
Railway Postal Clerks
Customs Inspectors
Stenographers-Clerks
Many Other Jobs

GET READY IMMEDIATELY

Common Education Usually Sufficient

Mail Coupon TODAY SURE

COUPON

Franklin Institute
Dept. W-258,
ROCHESTER, N. Y.

Gentlemen: Rush to me, FREE of charge, list of U. S. Government big pay jobs. Send FREE 32-page book describing salaries, vacations, hours, work, etc. Tell me how to qualify for one of these jobs.

Name.....

Address.....

EVERY ISSUE OF COLLEGE HUMOR 15c EVERYWHERE

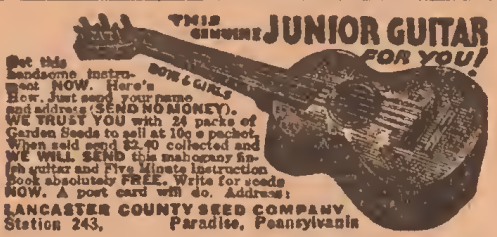
Be an ARTIST!

You Can Train at Home in Your Spare Time

The W. S. A. practical spare-time method has trained men and women of all ages since 1914. COMMERCIAL ART, CARTOONING, and DESIGNING all in one complete course. Trained Artists are capable of earning $30, $50, $75 a week. No previous Art experience necessary. FREE BOOK, "Art for Pleasure and Profit," describes course and TWO ART OUTFITS included. State age.

WASHINGTON SCHOOL OF ART, STUDIO 663-P, 1115—15th ST., N. W. WASHINGTON, D. C.

FREE BOOK gives details



Get this handsome instrument NOW. Here's How. Just send your name and address (SEND NO MONEY). WE TRUST YOU with 24 packs of Garden Seeds to sell at 10c a packet. When sold send $2.40 collected and WE WILL SEND this mahogany finish guitar and Five Minute Instruction Book absolutely FREE. Write for seeds NOW. A post card will do. Address:

LANCASTER COUNTY SEED COMPANY
Station 243, Paradise, Pennsylvania

THE TRUTH ABOUT

Stomach Ulcers

Caused by Gastric Hyperacidity

FREE Booklet on simple home treatment. Many report they were saved from expensive operations. Learn all about this amazing inexpensive home treatment. Pain relieved from the start. No rigid or liquid diet. This valuable booklet sent FREE with information as to guaranteed trial offer. TWIN CITY VON CO., Dept. 209, Saint Paul, Minnesota.—Adv.

TEAR GAS

100% Protection

A REAL SURE FIRE SELLER

Thugs and Thieves Beware!—Here is a regular 5 shot repeater which discharges 5 smothering clouds of Tear Gas in rapid succession to instantly Stop, Stun and Incapacitate the most vicious man or beast. A safe and effective substitute for dangerous firearms. NO PERMANENT INJURY. Needed in Stores, Banks, Autos and Homes everywhere to protect Life and Property. No skill required. Also Pencil Guns, Electric Shells, Riot Bombs, Fountain Pen Guns, Police Club Guns. All precision-built. NO TOYS. Every demonstration leads to a $3.00 to $8.00 sale, offering big profits. Handle our Tear Gas Equipment as a side-line and you'll soon give it full time. For a quick start, send $2.00 for complete demonstrator outfit consisting of an Automatic Pencil Gun with 10 demonstrators and 3 powerful Tear Gas cartridges, fully guaranteed.

FREE Blue Print showing how to install Electric Tear Gas Shells in Stores and Banks for hold-up and burglary protection. also Complete Sales Plan furnished with order or inquiry. HAGEN IMPORT COMPANY, Dept. H-440, St. Paul, Minn.

Crime and Mystery Thrills on Every Page of

POPULAR DETECTIVE

NOW ON SALE **10c** AT ALL STANDS

GUINEA PIG, PH.D.

(Continued from page 118)

not help but see the ridiculous parallel between my experience and that of the poor little subjects with which I had worked in my laboratory.

The rushing motion began again. The blue disc dwindled, receded and vanished. I was whirled through the twisting colored vapors. And then I noticed that my skin was beginning to parch and burn with an intolerable rasp.

It seemed as though I were rapidly evaporating, as though something were being sucked out of my body. I rubbed and chaffed at my hands and face, trying to ease the agonizing burns. And then, as I brought my fingers close to my eyes, I saw they were slight silted with a faint red mud!

The motion ceased, and with an abrupt jolt, the white cables—or were they super-fingers—loosened their hold and I dropped a few inches to my feet. Suddenly I became sick with terror, sick with the fear that I was standing in an unknown space on the brink of some infinite abyss. Sick with the loneliness of a man with no familiar thing by which to orient himself. Nothing but the living colored mist that was slowly sucking my life away.

I took a timid step, feeling with my foot like a blind man groping for an invisible stair. There was solidity before me. I took another step and then a third. Where my support came from in that never ceasing, pulsating mist, I could not tell. I only knew that I was on something firm.

In a few seconds I was walking slowly, presently I was sauntering. And then I began a brisk march that took me, as far as I could tell, to nowhere in particular. There was absolutely no perspective, no depth, no dimensions. It was impossible for me to focus my eyes on anything.

THE mist took on more vigorous life as I increased my pace. I felt like a swimmer trying to walk under water and I could not tell whether the resistance had increased or I had weakened, for my skin was plastered now with carmine and it tasted salt

BEST FUN, FICTION AND FOTOS IN

on my lips. It looked like clotted corpuscles after blood had been centrifuged, and I brought up in a frightened halt.

Corpuscles oozing, extruding through the skin! I looked around wildly. Osmotic pressure? Some peculiar property of this super-space atmosphere?

Then I noticed a break in the color-curtain. For the first time I was able to fix my eyes on something, although it seemed to be more than a faint steady patch of gray behind the vapors. I quickened my pace until I was running toward it, running down a long corridor of brilliance toward what seemed to be the mouth of a tunnel. Escape was before me.

As I approached, it opened out into a large crystal chamber, and I made a feverish dash to enter. Then, just as my foot crossed the threshold and I took my first step into the clear room, my frame was wracked by a violent grating vibration that ground my teeth together. A cacophony of ear-splitting thunders burst over my head. I tottered dizzily and shut my eyes. I was violently sick.

I felt a jolt at my waist and saw the two white cables fastened around me. There was a breathless flight through flickering space and once more I was lowered and jarred to my feet. Then I paused and took stock. . . .

So it was an experiment, after all. I, Simon Winter, experimental psychologist, was playing the part of a subject for some super-psychologists. I had to grin, despite the mist that was eating at my skin, despite the fear of was to follow. It was the cream of the jest that the experimenter should become the experimentee. But *what* was the test?

My legs were weakening. I staggered, and before I realized it, I had begun walking again. I hiked along like a man under a spell, watching the colored atmosphere and trying to figure out the experiment.

I had a inkling, but I wanted to be certain. I waited until the small patch of gray appeared once more, ran to it and darted over the door rim. It was the same great crystal chamber, but

(Continued on page 126)

ELECTRICITY

"LEARN BY DOING" 12 weeks training

I'LL FINANCE YOUR TRAINING!

My Big Free Book tells you how we train you in 12 weeks—to start in the growing field of Electricity, by actual shopwork on real electrical machinery—not by books or correspondence. Amazing plan enables many to get training first . . . then take 10 Months to pay in small monthly payments starting 5 Months from date you start school. Experience or advanced education not needed. Many Earn While Learning. Free lifetime employment service. Diesel Engines, Radio, Electric Refrigeration and Air Conditioning instruction included. MAIL COUPON for FREE BOOK and all Facts.

H. C. LEWIS, President, COYNE ELECTRICAL SCHOOL
500 S. Paulina St., Dept. 30-84, Chicago, Illinois
Send free book with Facts on Coyne, the Pay After Graduation plan, and extra 4 weeks Radio Course now included.

NAME _____ AGE _____
ADDRESS _____
CITY _____ STATE _____

MAGIC DISC

HEATS WATER IN 60 SECONDS

Any 110-Volt Line

Millions need Speed King—gives you hot water fast and cheap. Drop into any pan of water—plug into socket—in 60 seconds you have hot water. Rush your name for sample offer for use or demonstrator. Plenty cash profits for agents. No money. Just send name. Postcard will do.

Pocket Size SAMPLES FOR AGENTS. SEND NAME!

NU-WAY MFG. CO., DES MOINES, IOWA Dept. 503, Walnut Bldg.

EARN EXTRA MONEY at Home

Increase your income at home by new, simple Wentworth Tempera Color method. We instruct you and supply you with work. Write today for FREE BOOKLET.

Wentworth Pictorial Co., Ltd., Dept. 160, Hamilton, Ont.

HOW TO Write Stories that SELL

Mrs. Grace Blanchard had an IDEA for a story. We criticized her story, gave it a new title and told her WHERE TO SEND IT. She got a substantial check THE FIRST TIME OUT. That is a THRILL many of our graduates have each month. Let 22 years of experience guide YOU. Endorsed by Jack London.

FREE BOOKLET "THE ART OF STORY WRITING" with explanation of our personal criticism and manuscript sales service. No obligations. Write!

HOOSIER INSTITUTE (*Est. 1917*) Dept. 4173 FORT WAYNE, IND.

WANTED

MEN AND WOMEN TO MAKE UP TO $32.00 IN A WEEK

Introducing Hose Guaranteed 4 to 8 Months

Earnings start at once! Brand new Ford given producers. Everybody buys hose. Guaranteed to wear from 4 to 8 months (depending on number of pairs) without holes, snags or runs or replaced FREE. Big repeat sales. Dorie Jensen, Ill., earned $11 in 5½ hrs. received 2 new cars; Charles Mille, Minn., earned $120. In 1 week and received 2 new cars, also extra bonuses. Your own hose given as bonus, send hose size. Rush name on penny card for sample outfit, details. Act Now. WILKNIT HOSIERY CO., Midway CC-48, Greenfield, O.

Send No Money

HOSE FOR YOUR PERSONAL USE SENT WITH OUTFIT

EVERY ISSUE OF COLLEGE HUMOR 15c EVERYWHERE

MAKE YOUR OWN RECORDS AT HOME

Now a new invention permits you to make a professional-like recording of your own singing, talking or instrument playing. Any one can quickly and easily make phonograph records and play them back at once. Record your voice or your friends' voices. If you play an instrument, you can make a record and you and your friends can hear it as often as you like. You can also record orchestras of favorite radio programs right off the air and replay them whenever you wish.

Find Out If You Have Professional Talent

The movies . . . radio . . . stage in both Broadway and Hollywood are seeking new talent.

Before spending money for an audition, make a "home record" of your voice or instrument and mail it to a reliable agency . . you might be one of the lucky ones to find fame and success thru this easy method of bringing your talents before the proper authorities.

IT'S LOTS OF FUN, TOO!

You'll get a real thrill out of home recording. Surprise your friends by letting them hear your voice as though it were broadcast. Record a snappy talking feature. Record jokes and you will become the life of the party. Great to help train your voice and to cultivate speech . . . nothing to practice . . . you start recording at once. No other mechanical or electrical devices needed. Everything necessary included. Nothing else to buy. Just sing, speak or play and HOME RECORDO unit which operates on any electric or old type phonograph will do the recording on special blank records we furnish. You can immediately play the records back as often as you wish. Make your home movie a talking picture with HOME RECORDO. Simply make the record while filming and play back while showing the picture.

OPERATES ON ANY AC OR DC
ELECTRIC PHONOGRAPHS
RECORD PLAYERS
RADIO-PHONE COMBINATIONS
Old or New Type
PHONOGRAPHS and PORTABLES

SEND NO MONEY!

Everything is included. Nothing else to buy and nothing else to pay. You get complete HOME RECORDING UNIT which includes special recording needle, playing needles, 6 two-sided unbreakable records, (equivalent to 12 records). Also included guide record attachment combination recording playback unit suitable for recording a skit, voice, instrument or radio broadcast. Additional 2 sided blanks records cost only $.75 per dozen.

COMPLETE OUTFIT

INCLUDING 6 TWO-SIDED BLANK RECORDS ONLY **$2.98**

HURRY COUPON

START RECORDING AT ONCE!

HOME RECORDING CO.
11 West 17th St., New York

Home Recording Co., Studio KD
11 West 17th Street, New York, N. Y.

Send entire HOME RECORDING OUTFIT (including 6 two-sided records) described above by return mail. I will pay postman $2.98, plus postage, on arrival. (Send cash or money order now for $3.00 and save postage.)

Send.....Additional records at 75c per dozen.

Name .....

Address .....

NOTE: Canadian and Foreign $3.00 cash with order

(Continued from page 125)

this time there were no shuddering vibrations, no sickening nausea and roaring noises.

I knew then, that the cables would come down for me again, as they had before, and once more carry me off in swift flight. I knew then what the experiment was. A super-space 'Y' tube— I was the earthworm!

Keep to the right, no shock. Take the left turn and sickness and nausea. But what was the difference? Which was right and which left? This was space as I had never seen it before. I could not get my bearings. And, the silt on my skin—

AND then began the long series of journeys. I knew what the problem was, there was no doubt about that. I understood what the experimenters wanted me to do. But there was a missing factor.

As I ran and ran, for seeming endless hours, and stumbled alternately into one or the other of the two chambers, I realized that the solution was beyond my comprehension. There was that missing factor of space. I could not reason out their dimensions. So long as that was impossible, I would never solve the mystery of the 'Y'.

Then I realized that that was the problem. That was the crux of the experiment—and I was failing miserably. The red on my skin was thickening to a mud and suddenly I was overcome with hysteria. I began running madly in vain efforts to pound my way out of the experiment, and the horrible series of run-shock-run continued.

Every so often I would somehow stumble in the right direction for a brief respite, only to be picked up and started off on another wild, groping tour. The torture of the vibrating thunder was unendurable insanity and I began to think I was going out of my mind.

Then I noticed I was entering the right chamber more often. I was in a hopeless state of bewilderment by then, knowing only that I was to run each time the blanket of dancing colors smothered me. I was to run and run, hoping I would take the right unknown direction.

I could not be certain of any particular path for there were no landmarks as we knew them in our space to use as guides. But the shocks grew more infrequent until at last I was dashing blindly into the right room at each successive try. There was no doubt about the relief of that!

The white cables returned me again and again, and each time my body led me blindly and accurately in the right direction. At last the cables swept me up and held me for a time in a colorless, pearly mist.

But there was no relief in that. For suddenly I remembered what we did to earthworms when at last they had learned the secret of their little glass tubes. I struggled feverishly in the grasp of the glittering metal.

I knew that I had not learned. I knew that only my body, conditioned by the enervating shocks, had learned its painful lesson. And I had the desperate knowledge that these great experimenters were about to prove it. Excision? No, perhaps not that, but at least something to destroy the brain.

I was conscious of the gigantic dim shapes moving about me as I pounded and beat at the white cables, the white fingers, perhaps. I wanted to bite and scratch at them like a snarling, snapping rat.

The opalescence was clouded by a magenta mist that drifted, cone-shaped, toward me as though it had been blown from the nozzle. It choked and filled my lungs with a ghastly sweetness. I was afraid of some anesthetic and held my breath. But it passed and left my skin clear and unsmudged. Evidently they had bathed me in some antiseptic.

Then, I twisted my arms around the gigantic fingers that held me and dug for my pockets. As I struggled, I could see traces of another cloud drifting up in blue whirls to envelop my figure. Drifting from far in the distance where I could barely see the glimmer of a metal nozzle.

I had to make the last attempt to bite before the cloud arrived, for I knew it must be the anesthesia. I fumbled desperately for anything, and

(Continued on page 128)

FISHING TACKLE at *LOW Prices*

Send today for New 1940 Catalog listing thousands of bargains in Fishing Tackle, Baseball, Basket Ball, Golf, Tennis, Archery, Guns, Clothing and Sporting Equipment of all kinds. Top quality—***Money Back Guarantee!***

HERE ARE A FEW MONEY-SAVERS

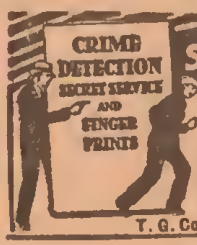
$17.50	Bamboo Fly Rod, Alu. Case & 2 Tips	$8.95
$9.00	DeLuxe Split Bamboo Fly Rod . . .	$4.95
$4.00	Split Bamboo Bait Rod, 9½′ extra tip	$2.85
$3.00	1-pc. Steel Casting Rod, Offset handle	$1.89
$2.75	1-pc. 3½′ Split Bamboo Casting Rod	$1.79
$3.75	Automatic Fly Rod Reel, light weight	$2.29
$6.50	Feather-weight Bamboo Fly Rod, 7½′	$3.95
$5.00	Double Tapered 30-yard Fly Line . .	$2.95
$1.00	doz. assorted snelled Trout Flies doz.	49¢
$1.00	doz. Ringed Trout & Bluegill Flies doz.	49¢
$1.00	assorted 6 floating Bass Bugs, 1/0 hook	59¢
	Spalding matched Bobby Jones steel shafted Woods, 1940 models, ea.	$4.95
	Spalding matched Bobby Jones steel shafted Irons, chrome finish, ea.	$3.95

Order any above specials C.O.D. or remit cash. FREE with $6.50 purchase or more, metal snelled hook holder or metal ribbed sport glasses. Other premiums.

FREE 136-Page Catalog

Yours for the asking. Invaluable to every sportsman. Contains the famous "Fisherman's Calendar."

GATEWAY
SPORTING GOODS CO.
131 Gateway Bldg., Kansas City, Mo.



SECRET SERVICE BOOK FREE

Sent For 30 Days Reading
No Money Down—Actual Crime Cases—
If You Act Quick!—We will send you this stirring book on Crime Detection, Secret Service and Identification Work for 30 days free reading. Send no money. If you decide to keep it, then send me only $1.00. If not, return it. WRITE TODAY. Literature sent only to persons stating their age.

T. G. Cooke, Dept. 7963, 1920 Sunnyside Ave., Chicago

WRITE FOR PAY! TAKE THIS TEST FREE

Send for our FREE Market Propensity Test. Designed to show for which of 2,500 Paying Markets for free-lance writing you are best fitted. Write TODAY! COMFORT WRITER'S SERVICE, Dept. 413, St. Louis, Mo.

FREE SAMPLES OF REMARKABLE TREATMENT FOR

Stomach Ulcers

Due to Gastric Hyperacidity

H. H. Bromley, of Shelburne, Vt., writes: "I suffered for 10 years with acid-stomach trouble. Doctors all told me I had ulcers and would have to diet the rest of my life. Before taking your treatment I weighed 143 pounds and could eat nothing but soft foods and milk. Now, after taking Von's Tablets, I weigh 171 pounds, can eat almost anything and feel perfectly well." If you suffer from indigestion, gastritis, heartburn, bloating or any other stomach trouble due to gastric hyperacidity, you too, should try Von's for prompt relief. Send for FREE Samples of this wonderful treatment and details of guaranteed trial offer. Instructive Booklet is included. Write

PHILADELPHIA VON CO., DEPT. 929-F,
Fox Building, Philadelphia, Pa.

Kidneys Must Clean Out Acids

Excess Acids and poisonous wastes in your blood are removed chiefly thru 9 million tiny delicate Kidney tubes or filters. And non-organic and non-systemic disorders of the Kidneys or Bladder may cause Getting Up Nights, Nervousness, Leg Pains, Circles Under Eyes, Dizziness, Backache, Swollen Ankles, or Burning Passages. In many such cases the diuretic action of the Doctor's prescription Cystex helps the Kidneys clean out Excess Acids. This plus the palliative work of Cystex may easily make you feel like a new person in just a few days. Try Cystex under the guarantee of money back unless completely satisfied. Cystex costs only 3c a dose at druggists and the guarantee protects you.

DICE. CARDS.
Specialties for Magicians use. Inks. Shiners. Check-Cop. Daubs. Catalog ten cents, stamps or coin.
HILL BROS., Box T, Salida, Colo.

BUSINESS PAYS BEST
TRAIN WITH SPECIALISTS, BE A
Secretary, Social Secretary, Bookkeeper, Accountant, Stenographer, Typist. Business always offers best opportunity with advancement to executive positions of business and social standing. For TWENTY-FIVE YEARS we have specialized in this training—building better courses at less cost by Home Study. Write today for testimonial folder showing what others have done. Give age, occupation and courses in which interested.
PERRY SCHOOLS, BOX 462, BRUNSWICK, GEORGIA.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933, of Startling Stories, published bimonthly at Chicago, Illinois, for October 1, 1939. State of New York, County of New York, ss. Before me, a Notary Public in and for the State and County aforesaid, personally appeared H. L. Herbert, who, having been duly sworn according to law, deposes and says that he is the Business Manager of Startling Stories, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit: 1. That the names and addresses of the publisher, editor, managing editor, and business manager are: Publisher, Better Publications, Inc., 22 West 48th Street, New York, N. Y.; Editor, none; Managing Editor, none; Business Manager, H. L. Herbert, 22 West 48th Street, New York, N. Y. 2. That the owners are: Better Publications, Inc., 22 West 48th Street, New York, N. Y.; H. L. Pines, 22 West 48th Street, New York, N. Y. 3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: none. 4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders, who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds or other securities than as so stated by him. H. L. Herbert, Business Manager. Sworn to and subscribed before me this 1st day of October, 1939. Eugene Wechsler, Notary Public. My commission expires March 30, 1941.

(Continued from page 127)

my hand touched the cool haft of my pocket knife.

I withdrew it, snapped open the blade and placed the tip against the shining white metal of those colossal fingers. The first blue fringes were sweeping over me and I got a whiff of intoxicating musk.

I held my breath and with open palm hammered at the end of the knife, trying to drive the point in. I pounded until my hand reddened and bruised, until I thought my chest would burst. I hammered until at last the gleaming white gave way suddenly and the knife-blade drove swiftly in to the hilt.

I was jerked violently in space, far from the deadly blue cloud, until once again I was surrounded by the dancing whirls of that vivid atmosphere. There came to my ears, from far overhead, a great, droning sound, as though the super-psychologist had cried out in pain.

Cried out in pain—certainly, that was it! The way I had yelped many a time when an infuriated white rat had turned and nipped my fingers. I looked at the knife. It was still buried in the white tentacle and an enormous drop of luminescent fluid was oozing from the wound. The thunderous drone vibrated in my ears and I was dashed violently through space. . . .

* * * * *

THE sound resolved itself into the hearty laughter of the class, roaring at my quip. My eyes flickered tentatively and then managed to open, and my hand finished its forward progress to hover over the tongs on the shelf. A faint tremor passed across my body and I felt as though I had just awakened from some chromatic hallucination.

I had said that the crayfish tank was really our reservoir of subjects, although ostensibly a happy home to them. Then what about our own earth? Was our reality a mere specimen jar for super-scientists in another space and time? Scientists whose hours of experimentation were so small a frac-

tion of our time that my brothers in the tank were not even aware that I had been removed with cosmic tongs and returned?

I picked up my own instrument and returned slowly to the demonstration table. It might have been a momentary hallucination, I reflected. A weird distortion of my own experiences. Especially that bit about flinging the subject back into the tank. How many times I'd done that in fury after a crayfish had scissored my fingers! But I was frightened.

For the knife was not in my pocket when I felt hopefully, and I knew it had been there. It was probably being plucked out by an enraged experimenter somewhere in another space. An infuriated man who might be staunching the luminescent blood with a colossal piece of tape.

And I was still in the tank. He would remember that I had been used before, might want to continue the experiment that had been interrupted—for how long? Trembling and trying not to show it, I faced the class.

"But remember this, ladies and gentlemen," I continued. "We must not be too smug. The behavior of humans may be no more than a similar elasticity of instincts. For all we know, we may be as rigorously bound to instinctive behavior as the birds and insects. Our capacity for thought, of which we boast so much, may be nothing more than this on a broader plane. So don't feel too superior when we experiment on the stupid earthworm, for there may be some colossal student of colossal psychology waiting to experiment with you. Remember, humility is a necessary ingredient for every scientist—and for every human being."

•

Our Next Novel

TWICE IN TIME

By MANLY WADE WELLMAN

GUARANTEED TIRES!
GOODYEAR • GOODRICH
FIRESTONE • U.S. and
Other Standard Makes

FREE! LANTERN
With Every 2 Tires ordered

Complete with batteries and newest type reflector bulb. Ready for instant use. Strong, steady light. Useful everywhere. Order now.

World's Lowest TIRE PRICES

Tire users by the thousands all over the U.S.A. vouch for the Long Hard Service of our Standard Brand tires reconditioned with high grade materials and latest methods by our tire experts. Our 21 years experience makes it possible to offer tires at lowest prices, with legal agreement to replace at ½ price any tire that fails to give 12 Mos. Service.

EVERY TIRE GUARANTEED!

BALLOON TIRES

Size Rim	Tires	Tubes
29x4.40-21	$2.15	$1.05
29x4.50-20	2.35	1.05
30x4.50-21	2.40	1.15
28x4.75-19	2.45	1.25
29x4.75-20	2.50	1.25
29x5.00-19	2.65	1.35
30x5.00-20	2.85	1.35
6.25-17	2.90	1.35
28x5.25-18	2.90	1.35
29x5.25-19	2.95	1.35
30x5.25-20	2.95	1.35
31x5.25-21	2.95	1.35
6.50-17	2.95	1.40
28x5.50-18	3.35	1.40
29x5.50-19	3.35	1.45
6.00-17	3.40	1.40
30x6.00-18	3.40	1.40
31x6.00-19	3.40	1.45
32x6.00-20	3.45	1.55
33x6.00-21	3.65	1.55
32x6.50-20	3.75	1.75
6.00-16	3.75	1.45

REGULAR CORD TIRES

Size	Tires	Tubes
30x3½	$2.35	$0.95
31x4	2.95	1.25
32x4	2.95	1.25
33x4	2.95	1.25
34x4	3.25	1.35
32x4½	3.35	1.45

Size	Tires	Tubes
33x4½	$3.45	$1.45
34x4½	3.45	1.45
30x6	3.65	1.65
32x6	3.75	1.75
33x6	3.95	1.75
36x6	3.95	1.75

HEAVY DUTY TRUCK TIRES
(High Pressure)

Size	Tires	Tubes
30x5	$4.25	$1.95
33x5	3.95	1.75
34x5	4.25	2.25
32x6	7.95	3.65
36x6	9.95	4.45

Size	Tires	Tubes
34x7	$10.95	$4.65
38x7	10.95	4.65
36x8	11.45	4.95
40x8	13.25	4.95

TRUCK BALLOON TIRES

Size	Tires	Tubes
6.00-20	$3.75	$1.65
6.50-20	4.45	1.95
7.00-20	3.95	2.95
ALL OTHER SIZES		

Size	Tires	Tubes
7.50-20	$5.25	$3.75
8.25-20	6.25	4.95
9.00-20	10.95	5.55
9.75-20	13.95	6.45

DEALERS WANTED

SEND ONLY $1.00 DEPOSIT on each tire ordered. ($3.00 on each Truck Tire.) We ship balance C. O. D. Deduct 3 per cent if cash is sent in full with order. To fill order promptly we may substitute brands if necessary. ALL TUBES BRAND NEW—GUARANTEED—

PERRY-FIELD TIRE & RUBBER CO.
2328-30 S. Michigan Av., Dept. TF29, Chicago, Ill.

ITCH
STOPPED QUICKLY
Use D.D.D. Prescription
Quick relief from itching of eczema, rashes and other externally caused skin troubles
35c bottle, at druggists, proves it or money back

ASTHMA
TREATMENT mailed on Free Trial. If satisfied send $1; if not, it's Free. Write me for your treatment today.
W. K. STERLINE, 830 Ohio Ave., Sidney, Ohio

USED Correspondence Courses
Complete home-study courses and educational books, slightly used. Sold, rented, exchanged. All subjects. Money-back guarantee. Cash paid for used courses. Full details and illustrated 72-page bargain catalog FREE. Write today!
NELSON CO.
C-227 Manhattan Bldg., Chicago

WANTED
ORIGINAL POEMS, LYRICS, SONGS by a recognized Music Organization. Our contracts GUARANTEE PUBLICATION, marketing; include expert collaboration, where required. WE GIVE YOU ADVANTAGES NOT OBTAINABLE ELSEWHERE. Send your material today.
MUSIC PUBLISHERS AGENCY, Dept. X-21, Portland, Oregon.

NEURITIS
Relieve Pain in Few Minutes or Money Back
To relieve the torturing pain of Neuritis, Rheumatism, Neuralgia or Lumbago in a few minutes, get NURITO, the fine formula, used by thousands. No opiates. Does the work quickly—must relieve cruel pain to your satisfaction in a few minutes—or your money back. Don't suffer. Clip this ad now as a reminder to ask your druggist for NURITO today.

You Ask Me What I Am Doing?

I Am Getting Ready to Earn More Money . . . Preparing for a Bigger Job

I am a student of the American School, Chicago. A little more than half way through my course—already my increased knowledge has brought me promotion as a result of the hour or so a day I have been spending getting acquainted with the principles of the work I enjoy. I use only part of my spare time, so it doesn't interfere with my home and social life, and certainly helps me on the job.

I have been surprised at the practical manner in which even advanced work is explained. It is a lot easier than I had expected. I only wish I had started this plan of getting ahead a few years earlier. But when I was 18 to 20 I felt pretty sure of myself. I didn't take enough stock in what more experienced people told me about the importance of being thoroughly trained for the job I wanted.

You Can't Win If You Don't Try

American School, Dept. G-358, Drexel Ave. at 58th St., Chicago

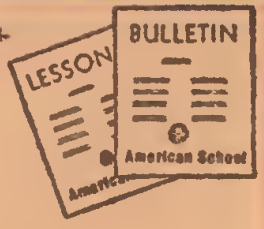
CUT ALONG THIS LINE

Try a Lesson Yourself—No Obligation

American School, Dept. G-358, Drexel Ave. at 58th St., Chicago

I have checked the line of work in which I would like a good job. Please send me without expense or obligation on my part a copy of your Bulletin and an early lesson in the field I have selected.

- ☐ Air Conditioning
- ☐ Architecture
- ☐ Automotive Engineering
- ☐ Automobile Repairing
- ☐ Bookkeeping and Cost Accounting
- ☐ Business Management
- ☐ Civil Engineering
- ☐ Aviation
- ☐ Contracting, Building
- ☐ Electrical Engineering
- ☐ Diesel Engineering
- ☐ Drafting and Designing
- ☐ Electric Refrigeration
- ☐ Heating, Ventilating, Plumbing
- ☐ Professional Accounting Incl. C. P. A. Coaching
- ☐ High School
- ☐ Highway Engineering
- ☐ Law
- ☐ Liberal Arts (College)
- ☐ Mechanical Engineering
- ☐ Merchandising
- ☐ Private Secretary
- ☐ Radio and Television
- ☐ Salesmanship
- ☐ Shop Practice
- ☐ Steam Engineering



Name..... Age..... Occupation.....

Street..... City..... State.....

PRICE SMASHING SALE!

LATE MODEL • WORLD FAMOUS TYPEWRITERS

Less than 1/2 MFRS. ORIG. PRICE

BUY DIRECT FROM ME and SAVE OVER ONE-HALF

Act now—if you want to get the GREATEST BARGAINS EVER OFFERED in late model standard office size world famous typewriters. My DIRECT-TO-YOU plan brings you these late Standard Make Typewriters at SENSATIONAL LOW PRICES—**at less than ½ mfrs. orig. price. Some even as low as $26.90—less than 1/3 mfrs. orig. price!** Because I deal Direct With You—because I have no salesmen, no branch offices, no expensive stores and showrooms—I give you TREMENDOUS SAVINGS on whatever standard make late model typewriter you choose.

ALL STANDARD MAKE LATE MODEL TYPEWRITERS

Here's your money saving opportunity of a lifetime. Think of it — you get typewriters that cost up to $110 for less than ½ the mfrs. orig. price—with amazing savings up to $72.60. Take your pick—UNDERWOOD—ROYAL—REMINGTON—L. C. SMITH—WOODSTOCK—I have them all. **All with up-to-date features and FULLY GUARANTEED.** Completely Refinished and Rebuilt with many late improvements. Do not confuse these fine late model standard office size typewriters with old, inferior models or portables. **I ship you only GUARANTEED Late Model Standard make machines at new sensationally Low ROCK BOTTOM PRICES.** I TAKE ALL THE RISK on my 10-day No Money Down Trial Plan—the typewriter you select must sell itself on straight merit test and you are the sole judge.

FREE!

ROLL-AWAY SECRETARIAL TYPEWRITER STAND

Yours FREE with typewriter you select on this price smashing sale. *Makes every typewriter portable.* ALL Metal, mounted on casters. Can be moved by touch of finger. Big working surface, strong, compact, rigid, attractive, light weight. **Ask for details.**

10-DAY TRIAL

NO MONEY DOWN

EASY TERMS AS LOW AS **50c** A WEEK

Money-Back Guarantee

Yes, I mean it! I will ship you whatever late model standard make typewriter you choose—UNDERWOOD, ROYAL, REMINGTON, L. C. SMITH or WOODSTOCK—at my own risk so you can try it in your own home or office for 10 days. **Don't even pay one cent down**—the typewriter comes to you strictly on approval, and must satisfy you on its merit alone! You are the sole judge—no salesman, no pressure—no obligation to buy—Ship the typewriter back at my expense if you wish. Only when you have thoroughly convinced yourself that you have the biggest value ever offered—and only then—say, "I'll keep the machine." **Use easiest terms yet—as little as 50c a week (only 8c a day) or $2.00 a month!**

FREE Complete VAN ZANDT TOUCH TYPING COURSE

On this sale I give you **FREE** this famous complete 9 lesson Home Study Course, so you can learn to type quickly and easily. **SEND COUPON below for all details and BIG FREE CATALOG in natural colors — NO OBLIGATION—Mail Coupon today!**

SEND COUPON FOR BIG FREE CATALOG!

OVER 200,000 SATISFIED CUSTOMERS HAVE BOUGHT TYPEWRITERS DIRECT FROM ME

Through the same Golden Rule Policy I offer you—the Ten Day Trial, No money down. MONEY BACK GUARANTEE—and shipment on approval—I have served over 200,000 customers all over the world. **I give the savings of my direct-to-you plan to you, my customer.** You can buy with confidence on my Personal Money Back-Guarantee, backed by over a quarter-million assets and 30 years of fair dealing.

SEND COUPON NOW WHILE STOCK IS COMPLETE

Don't buy a typewriter until you get my FREE BIG COLOR CATALOG showing all late standard make typewriters at amazing smashed prices! NO OBLIGATION—It costs nothing to see—so fill out coupon and mail today—while this sensational money saving sale lasts.

Mr. W. F. Clausing, President,
INTERNATIONAL TYPEWRITER EXCHANGE
231 W. Monroe St., Chicago, Illinois. Dept. 388

Please send WITHOUT OBLIGATION complete Illustrated FREE CATALOG IN COLORS, showing late model Standard TYPEWRITERS at tremendous savings, with no money down and 10-day Trial. Also Free Stand and Touch Typing course offer.

Name .....

Address .....

Town ..... State .....

Above—AN ACTUAL COLOR PHOTOGRAPH. A. B. Mize of North Carolina grew some of the finest tobacco he ever raised—thanks to U. S. Government methods.

Uncle Sam, TOBACCO EXPERT!

"U. S. Gov't methods have made tobacco better than ever . . . and Luckies buy the choicer grades," says James Walker, 19 years an independent buyer.

Q. "What are these methods of Uncle Sam's?"

Mr. Walker: "They're scientific ways of improving soil and plant food . . . that have helped farmers grow finer tobacco in recent years."

Q. "And that's what has made tobacco better?"

Mr. W: "The best in 300 years . . . even though crops do vary with the weather."

Q. "You say Luckies buy the 'Cream of the Crop'?"

Mr. W: "They sure do. That's why they're the 2-to-1 choice of independent experts—warehousemen, auctioneers, buyers. I've smoked them 10 years."

Try Luckies for a week. You'll find that the "Toasting" process makes them easy on your throat—because it takes out certain harsh irritants that are found in all tobacco.

You'll also find out why . . .

WITH MEN WHO KNOW TOBACCO BEST—IT'S LUCKIES 2 TO 1

Copyright 1940, The American Tobacco Company